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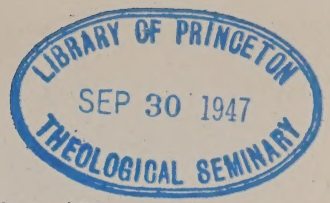
The American  
Individual Enterprise  
System

VOLUME I

THE QUALITY OF THE MATERIALS USED IN  
THE MANUFACTURE OF THIS BOOK IS GOV-  
ERNED BY CONTINUED POSTWAR SHORTAGES







# The American Individual Enterprise System

ITS NATURE, EVOLUTION, AND FUTURE

VOLUME I

*by*

The Economic Principles Commission  
of the  
National Association of Manufacturers

*First Edition*



McGRAW-HILL BOOK COMPANY, INC.

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## FOREWORD

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Some six years ago the Board of Directors of the National Association of Manufacturers requested the President of the Association to appoint an Economic Principles Commission, which should be asked to study the American economic system.

The Board of Directors believed that, while there was much talk of the "free enterprise system," there was little real economic understanding of it and much need for such understanding. There were many pamphlets about "free enterprise," but no serious books of definition and explanation. It was to fill this lack that the Economic Principles Commission was appointed.

The Commission comprised both business executives and economists; the latter included both outstanding economists in the academic field and leading economists within the ranks of industry.

The Commission was asked to submit to the N.A.M. Board of Directors a thorough analysis of the philosophy, operations, and achievements of the American economic system; a discussion of attacks upon that system; and an appraisal of the future problems of the American enterprise system — all of this without reference to previous or current Association positions.

The task has now been completed — insofar as any economic or engineering or research project is ever "completed," while those responsible for it ever seek further perfection — and is presented in the following series of chapters or monographs on the American Individual Enterprise System.

From the very start, neither the Board of Directors nor any of the N.A.M. officers interfered in any way with the studies or the full expansion of opinions by the Commission. So far as I am aware, this is the first time that such an eminent group of economists has jointly studied and reported on the important economic subjects contained in the following chapters. The members of the Commission, individually and jointly, have made a valuable contribution to the expression of sound economic principles.

The work performed by the members of the Economic Principles Commission was thus characterized by the Chairman, Robert R.

Wason, in announcing to the N.A.M. Board of Directors completion of the Commission's assignment:

This book is unique in that it confronts the present economic babel and discord with the harmonized viewpoints of topflight economists and businessmen in a unified statement of principles and objectives. It is probably the only economic text ever written that carries the signed support of a wide cross-section of American economic and business thinking at its peak.

Truth was wrung from constant controversy. Views of academic economists, business economists, and scholars were expressed out of their academic and business knowledge and experience. Seeming differences of opinion dissolved in discussion. Harmony grew from precise statements of conflicting opinions. This book is not a compromise of opinions. Its conclusions were reached without sacrifice of judgments but by considered debate of each subject studied.

The book could have been shorter, but it would not have been so complete as it is. It could have omitted many modifying phrases, but it would not have been believed. It could have been more decisive, but it would have been less convincing. It could have been less detailed, but would have been less educational and less useful. It could have been completed earlier, but no one would have signed it or accepted responsibility for its earlier conclusions. [There is attached a letter from Mr. Wason giving acknowledgment for assistance to the Commission.]

The N.A.M. Board of Directors, cognizant of the significant nature and merits of the vast undertaking performed by the Economic Principles Commission, welcomes this opportunity to present its achievement to the American public. It deserves extensive circulation among and intensive study by all business executives and students of economic facts and trends.

The observations, conclusions, and recommendations made by the Economic Principles Commission represent the consensus of judgment among the Commission members. Since the Commission was established and functioned as an independent agency, the views expressed are therefore those of the Commission's members and are not necessarily those of the N.A.M.

It is frequently said that the expressions of economists and businessmen disregard the more important spiritual and cultural values. This study doubtless will be subject to that same criticism. A word of explanation, therefore, is appropriate.

As I see it, the group of economists and businessmen who have participated in this work have sought to make their study objective and within their own respective fields of expertness. Whatever their approach to the verities of life, they have felt that as businessmen and economists they cannot speak with authority outside their fields of specialized competence—a rule which works both ways. Although their study has been directed purely to economic principles, I am sure they do not assume that economic truth is all that there is to life or that economic progress is an end in itself. On the contrary, if one thing is apparent throughout

these pages, it is that the authors and contributors base their whole approach on the dignity, indeed on the sanctity, of the individual as individual.

The capacity of the American Individual Enterprise System to promote economic well-being is a concrete, measurable thing — not a theoretical promise of abundance. Opportunity and security are not incompatible goals, and the pages of this book offer the path to the realization of the American Dream. Industry, labor, and government working together in a spirit of cooperation cannot fail.

Not the least in the values of the American Individual Enterprise System is the fact that it best enables men to produce in part of their time enough so that they may have leisure to draw aside from necessitous labor and develop their awareness of the less tangible but more fundamental values in life, combining the material, cultural, and spiritual.

IRA MOSHER, *Chairman of Board,*  
*National Association of Manufacturers*

NEW YORK, N.Y.,  
November, 1946.



## ACKNOWLEDGMENTS

*to*

Walter B. Weisenburger

*Executive Vice-President of the N.A.M.*

The Commission asks me to express its high appreciation of the able and tireless manner in which your Mr. Sargent organized the general program, the great ability that he brought to the solution of involved problems, and the freedom that he granted all members to speak their judgments. Never at any time did Mr. Sargent dictate or indicate one sentence of policy for the text prepared. He was a fine host, a grand person, a credit to you, a constant benefit to the Commission.

Your Commission expresses its appreciation for the endless help supplied by Mr. John Gebhart. Always his research produced facts to assist judgments on countless problems otherwise insoluble. During the period of the Commission's labors, Mr. Gebhart added greatly to the factual knowledge of every member.

Your Commission thanks Miss Horsch also for the constant help, for the courtesies and kindnesses, that she always showed every member.

Never at any time or place did you or your representatives suggest what the findings of the Commission should be or the way in which they should be stated.

Your hands-off policy permitted the free and true judgments of the economists and scholars on the Commission to be stated in the text prepared for your Association.

ECONOMIC PRINCIPLES COMMISSION

*by Robert R. Wason, Chairman*

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## PREFACE

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The purpose of this series of monographs is to discuss the nature, operation, achievement, criticism, and major problems of the American enterprise system. The request that such analysis be prepared was made some six years ago by the National Association of Manufacturers, which declared, and has adhered to the declaration, that the authors of the monographs had complete liberty of thought and expression, without regard to the past or present beliefs of the Association or its committees and officers.

Each of the following monographs or chapters represents the consensus of the entire group. The membership of the group has fluctuated, so that those participating in consideration of the various monographs have varied somewhat.

The names of those who were members of this group at the time of the completion of the manuscript appear as the authors on a preceding page. Of these, Messrs. Cumberland, King, Smith, and Westerfield have been members of the Economic Principles Commission since it started work on the monographs. The names of others who have participated at different times as members of the group also are printed following the list of authors.

The fact that each of the following monographs represents a consensus means that in each monograph there may be many statements with which one or more members of the group are not in agreement, and that in other cases full agreement has been obtained because the majority was willing to modify some statements. Each monograph, in other words, is a group judgment, not from a viewpoint confined to one individual.

At all times the group has been about evenly divided between professional economists, both academic and business, and business executives. Each has brought to the others thought and experience which have been new and stimulating. It is hoped that as a result the monographs reflect a balance of business and economist consideration which will render them of interest and value to other economists and businessmen, and of constructive aid to public knowledge.

Finally, it may be stated that the group responsible for preparation of the monographs has had but one goal—the promotion of an economic system which will provide for Americans, in both the present and the future, substantial and necessary physical well-being and comfort—bearing constantly in mind that opportunity for spiritual and cultural well-being and comfort is at least equally important, and that individual liberty and freedom, in both economic and noneconomic fields, are of primary importance.

THE ECONOMIC PRINCIPLES COMMISSION,  
NATIONAL ASSOCIATION OF MANUFACTURERS

NEW YORK, N.Y.,  
*November, 1946.*





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## I

# THE NATURE AND PHILOSOPHY OF THE INDIVIDUAL ENTERPRISE SYSTEM

---

WE have in the United States an economic system which is without exact parallel in any other nation of the world. The term "economic system" means not merely business as this word is commonly used. It includes all those activities and relations which have an influence upon, or affect, our making a living. It is concerned just as much with the organization of government as with the organization of business, with social problems as with production problems, and with training citizens as with training workers. All these elements are a part of the whole which is the "American way of life." We could not have our present system of production and distribution without our present system of government, nor our present system of government without our present system of business. They are woven together like the threads in a piece of cloth, and anything that affects one part will alter the whole.

More sharply expressed, our economic organization is one in which

- (1) the predominant proportion of economic activities is conducted on a competitive basis, with prices established through competition, rather than by government fiat;
- (2) those who perform these activities have opportunity for pecuniary gain and are subject to the risk of pecuniary loss;
- (3) our economic activities are subject, not to specific direction and control by government, but only to such laws, rules, and regulations within the limits of the federal and state constitutions as are agreed to by the majority of the electorate voting either directly or through their freely selected and legally responsible governmental representatives.

*Our economic system is interwoven inseparably into the whole fabric of American life.*

*It is mainly competitive, on a private profit-or-loss basis, and free within limits of laws enacted by representative government.*

## WHY WE CALL IT THE AMERICAN INDIVIDUAL ENTERPRISE SYSTEM

*The "American Individual Enterprise System" is so called to express its uniqueness, its dependence on free individuals, responsible for results of their own decisions, and its limitation of government economic activities.*

To get a term which adequately encompasses such a complicated organization is not easy. Perhaps the term which most closely approximates accuracy is the simple phrase "American Individual Enterprise System." This has the advantage of emphasizing that our organization is unique in the world of today, and, further, that a dominant feature of our system is that our citizens perform their tasks and make their decisions as free individuals rather than as mere puppets of the government.

In other words, the phrase "American Individual Enterprise System" recognizes, first, that in our economic system the production and distribution of goods and services are characteristically performed by private individuals or privately owned organizations operating under rules and regulations designed to realize the basic ideals and objectives of the people. Such rules and regulations are formulated in part directly by individuals or corporate groups through cooperation in trade associations and similar organizations, and in part by individuals acting indirectly through their freely selected governmental representatives.

Second, the term "American Individual Enterprise System" emphasizes that the property required in the production and distribution of goods and services is characteristically owned, controlled, and directed by private or corporate persons, and that these persons are responsible for the use of this property and may enjoy the benefits of the gains or suffer the losses resulting from their operations.

Finally, the term implies that the production and distribution of goods and services by government are limited, as determined by individuals through their freely selected representatives, to those fields in which such government activity is essential for the accomplishment of public policy.

### *Comparison with Other Terms in Current Use*

The superiority of the phrase "American Individual Enterprise System" over some of the other terms which are currently used is perhaps obvious.

Among these other terms one of the most widely employed is "Free Enterprise System." When properly interpreted this term is reasonably accurate, for "free" in this case means merely that economic restrictions are voluntary rather than imposed arbitrarily by government. But this meaning frequently is lost sight of and the term "Free Enterprise" is interpreted to mean a system in which individuals or voluntary groups of individuals, are free to produce and exchange goods and services without significant let or hindrance from the law. Such complete freedom, of course, is not possible under modern industrial conditions. Furthermore, it is not advocated by anyone. On the contrary, everyone, regardless of his political philosophy or his economic predilections, now recognizes that in certain phases of our economic system it is not only desirable, but is absolutely essential, for certain standards and rules to be set by law.

A second term almost as widely used to characterize our economic organization is "Private Enterprise System." This to a marked degree is a misnomer. We do not have in America, or in any other highly developed country, an exclusively private enterprise system. Whole sections of the economy, for example, the post office, harbor dredging, etc., have been taken over by the government. In addition, roads are public enterprises, schools are maintained for the most part from public funds, and numerous services of direct pecuniary value, such as the preparation of market analyses, trade reports, and foreign bulletins, are performed by the State. Further, the complicated processes of production and distribution are more or less extensively regulated by law, and the owners of property are curtailed in numerous respects in their exercise of the right of private ownership. Still further, through excise, income, and property taxes, inroads are made to a greater or less degree on the possible net return to be obtained from use of property or expenditure of energy; and, through estate, inheritance, and gift taxes, substantial limitations are placed upon the passing of private property from one generation to another.

A third phrase sometimes used to describe our economic organization is "Competitive Enterprise System." This term has two shortcomings: (1) There is a relatively

*Among other terms in current use: "Free Enterprise" may be interpreted as absolute freedom.*

*"Private Enterprise" may suggest disregard of necessary public enterprises and public regulation.*

*"Competitive Enterprise" seems to ignore*



*the many necessarily noncompetitive features of a modern economic system.*

*"American System" is not sufficiently specific or descriptive.*

*Our system is based on a distinctive philosophy and provides incentives not found in Old-World systems.*

*It regards the individual as of supreme importance, fundamentally responsible for his own welfare and entitled to the benefits he earns.*

*The hope of reward and the fear of loss*

large volume of activities of a noncompetitive character in our economy, such as the maintenance of schools and roads, which are performed by the State; and (2) various other activities have been definitely removed from competition in larger part by government through the granting of copyrights, patents, and franchises.

Still another term sometimes used to distinguish our economic organization is "American System." The difficulty of this phrase is that it is not sufficiently specific. It fails to give any definite picture of the particular type of economic organization which we enjoy. It could refer to a system of complete government ownership, or a corporate state, just as readily as it does to an organization in which individuals carry on the vast bulk of economic activities.

### *Our Prime Concern for the Individual*

The phrase "American Individual Enterprise System," to some extent at least, escapes the defects of these other terms. It should be recognized, nevertheless, that no mere term and no formal definition can adequately present those qualities which have made the American economic system so successful. Underlying our organization are a philosophy and incentives not found in any other type of political and economic system. As a people we have always held that security comes from opportunity and competition, not from government action. We have always believed that the property which an individual creates or acquires, the goods he produces, or the services he renders, belong primarily to him, and that he has a right to exchange them as he sees fit for the goods and services of others, subject only to such laws and regulations as are enacted or accepted by the majority of his fellow citizens for the protection and enhancement of the basic ideals and objectives of the people. In a word, we have regarded the individual as supreme, and maintained that the well-being of an individual must depend upon his own wisdom and ability, not upon government paternalism.

Because of this philosophy and this incentive, we have had, throughout our history, an energizing element that has not been present to an equal degree in any nation fol-

lowing a different course. We have brought to bear upon each individual the hope of reward and the fear of loss. On the one side, we have made it desirable for the individual to do those things which his own nature dictates, to seek those objectives which he himself regards as worthy, and in this way to improve his own position in that segment of society in which he finds himself or desires to place himself. On the other side, and just as important a part of our philosophy, we have imposed upon the individual the responsibility of his errors—the risk of losing his prestige, or his position, or his wealth and scale of living.

*have been important energizing factors.*

1. He has by his own choice engaged in those activities which he considered most desirable as a means of (and thereby) improving his position or that of his fellow men. The result of this has been that the opportunity for such reward and improvement has been largely responsible for determining the type of activity engaged in by an individual.

*Individuals could choose activities with regard to opportunities for rewards;*

2. He has been free to manage his affairs with only such governmental regulation or interference as necessary for the protection and enhancement of the basic ideals and objectives of the public.

*with reasonable freedom to manage their activities; with assurance of enjoying the fruits of their own efforts;*

3. He has been permitted to enjoy the fruits of his labor and activities, subject only to the limitation by the right of the community, acting through its freely chosen representatives, to determine

- (a) that certain types of business, or business practices, are undesirable or need to be supervised, and
- (b) that a portion of the community's aggregate income should be collected through taxes and expended for specified public purposes with a view of enhancing the general well-being of the people.

4. He has been permitted complete freedom of movement from one section of the country to another and from one occupation to another. This has meant that he has been able to take advantage of the opportunities which the country afforded and to be free of the stifling effects of geographic immobility and class stratification.

*with freedom of movement, geographically and vocationally.*

## FACTORS ESSENTIAL TO FUNCTIONING OF INDIVIDUAL ENTERPRISE

*Ours was never a system without government regulation, but we have tried to maintain certain conditions essential to operation of individual enterprise economy:*

In spite of this emphasis we have always placed on the rights and privileges of the individual as such, we never have had a system in which there was complete absence of governmental restraint and regulation. From the establishment of our republic we have recognized that for the individual to enjoy the freedoms and the opportunities mentioned above it has been necessary to establish and maintain certain economic principles and conditions. There has been, over the years, considerable variation in the success with which we have upheld these principles and conditions. At times, under misguided leadership, they have been seriously impaired. Taking our history as a whole, however, and looking to the future, we can see that there are four elements of outstanding importance. They are what may be termed the essential elements for the functioning of individual enterprise. These are:

1. *Hope of reward or compensation.* Without this, new economic activities will not be undertaken in a society in which citizens have a freedom of choice.

*1. Opportunities for earning a profit in business activities, as incentives to new undertakings.*

For any individual enterpriser, the hope of reward or compensation must be adequate to offset any displeasure or disinclination he may feel toward expending his time and energy on the activity in question, and to convince him that it is worth while to risk his previously accumulated wealth, or standing in the community, on the chance of bettering his position.

In the case of business, such hope is crystallized primarily in the possibilities of monetary earnings. Businessmen, before they undertake an operation, must be able to see the opportunity for not only enough income to cover the cost of raw materials, labor, and other items in the manufacturing process, but, as well, enough income to offset possible losses, to allow for "rainy days," to provide for necessary modernization and expansion of the plant, and still to have something left as earnings on the capital investment. A business which already is established may continue to operate for some time even when one or more of these conditions are not fulfilled, but if there is not the



hope of at least this minimum income new businesses will not be started and new capital will not flow into established organizations.

2. *Private ownership.* Without private ownership of personal property and private ownership of the means of production, it is impossible for individuals, over a period of time, to enjoy the full rewards of their efforts. Private property is the accumulation of the rewards and compensations for which activities were undertaken. Without the existence of private property there is little incentive for anyone to expend more energy, or time, than the amount that provision of immediate necessities requires. In other words, without the existence of private property most individuals will not work, unless by coercion, beyond the amount necessary to take care of their immediate wants. Under these conditions their output is almost certain to be disappointing, because coercion is not conducive to productive efficiency.

Closely related, and actually an inherent part of private ownership of property, is the right of bequest. Just as the ability to accumulate private property for one's own benefit constitutes a direct incentive for people to use their best abilities, so also the right to pass one's property on to others of his own choosing is an incentive to productive effort. In both cases, of course, limitations may be placed upon this right through taxation; and it may be granted that how far these limitations may go before they will seriously impair productivity is not capable of exact determination. Quite obviously, however, they can, if they go far enough, completely destroy the incentive to production that comes from the right of private ownership and the right of bequest. For the effective functioning of the enterprise system, therefore, it is essential that the restrictions and limitations be held short of this point.

3. *Contracts.* Under an individual enterprise system, and in any economic system where the people enjoy a scale of living above mere subsistence, a vast proportion of total production and productive activities is made possible only through the use of contracts extending over a considerable period in the future. It is for this reason—the assurance that there will continue to be adequate production to meet

*2. Right to accumulate property, as incentive to full use of productive ability;*

*also right of bequest, as similar stimulus.*

*3. Sanctity of contract, to encourage future commitments.*

the needs of the people—that we have constitutional guarantees of the sanctity of contract. Without this protection of the right to make future commitments that are enforceable by law, our whole system of production would collapse.

*4. Competitive freedom, to assure choice of activities suitable to ability, to stimulate full use of capacities, and to keep economy fluid and progressive.*

*Competition among individuals prevents stratification of people into rigid classes and encourages development of specialized skills.*

*Competition among companies spurs enterprise to satisfy people's wants.*

4. *Competition.* Competition frequently is thought of as referring almost exclusively to business operations. Actually, as an element of the American Individual Enterprise System, competition has a much broader meaning than this. For the efficient functioning of our economic organization, it is necessary not only that there shall be competition in the production and distribution of goods and services by business organizations, but also that there shall be freedom on the part of individuals to compete with other individuals in the use of their abilities and services, and in the terms on which they offer their abilities and services to others.

It has been this competition between individuals—this freedom of the individual to select that type of endeavor or those objectives which seem important to him and offer the greatest reward in service, money, power, or prestige—which more than anything else has kept this nation from becoming stratified into rigid noncompeting classes. As a result of this element in our economic system there has been a constant bringing of new persons into those levels of work requiring specialized skill, and this, in combination with the unusual ability of our people and the protection our constitutional system affords, is largely responsible for the relative freedom from dry rot which our economic system has enjoyed and for the incredible speed with which we have developed as a nation. The elimination of such competition between individuals would mean the loss of these advantages, the freezing of our people into a given economic status with no choice of bettering their position, and a material slowing down, if not virtually complete cessation, of our progress.

Competition among business firms is equally essential. Here it consists of the efforts by many organizations of individuals to get public acceptance for their respective products or services. Sometimes this acceptance is based on price, sometimes upon quality or service in relation to price.

From the point of view of the public, both mean the same thing. In both instances buyers express their independent judgment on how to obtain the greatest value for their money in quantity, quality, style, convenience, or otherwise.

In certain fields, it is true, such as in the provision of telephone service, competition is wasteful. In these cases society may be better served by the elimination of competition between companies and the substitution therefor of a single organization under able governmental regulation. The fact should be kept in mind, however, that this substitution does not guarantee efficient operation. A monopoly, whether private or governmental, tends to be, and frequently is, wasteful. Furthermore, because of the absence of competing firms in these cases, it is difficult to measure the degree of waste and to protect ourselves from it. In other words, even in some fields where society decides it is best to have either regulated private monopoly or outright government operation, the cost may be far in excess of what would be necessary under individual enterprise spurred to maximum efficiency through competition.

These exceptions to the general principle of our reliance upon competition constitute only a small part of the individual enterprise system. And they are not to any degree inconsistent with the general view held by the American public that, in the vast bulk of activities having to do with the production and distribution of goods and services, competition is a much more effective policeman than government supervision and regulation. For this reason we have continued to rely, wherever possible, upon competition as the best means to increase efficiency and maximize production and employment, and we have considered it the proper function of government merely to fix fair rules and enforce them without discrimination. In a word, it has been the conviction of the American public, and history has supported the conviction, that competition is the best possible guarantee for the development of the most efficient units, for having goods offered at the lowest possible prices, and for assuring the greatest benefit at the least cost for everyone concerned.

*Monopoly tends to be wasteful and inefficient.*

*Competition is the most effective regulator of enterprise, and guarantor of efficient public service.*



## CHANGES IN GOVERNMENT CONTROLS OF ENTERPRISE

*There has always been some government regulation of private activities.*

*In early history of the nation, regulation of business was left largely to local and state governments, and little was required.*

*Government regulation was slowly and reluctantly extended, as need has developed during past few decades.*

In the course of our development there necessarily has been an extensive change in the degree of government control to which our economic organization has been subjected. At no time in our history was it a "free system" in the sense that it was possible for individuals to consider their own acts without reference to others. From the beginning of the nation there has been some restriction and, as the population has grown, as industrial processes have become more complex, and as our markets have broadened, one after another of our activities has been brought under closer legal supervision for the presumed purpose of protecting and enhancing the general welfare.

The record of this expanding governmental regulation is well known. At the time of the formation of our union our population was so small, our natural resources were so great, and our methods of doing business were so simple that, with the exception of granting copyrights and patents, such regulation of business as was needed could be left almost entirely to the local and state governments. This regulation varied somewhat from state to state, but generally, it is accurate to say, it did not retard to any appreciable degree the production and distribution of goods. In fact, getting rid of regulations which needlessly restricted the prosperity of the country was one of the primary reasons for our breaking away from the British Empire and forming our own republic. For almost a century thereafter public opinion refused to support legislation limiting the lines of activity in which private individuals might engage and the conditions under which they might work.

The only major exceptions to this general attitude on the part of our people have been those instances in which it appeared evident that public interest would be better served by granting a monopoly, as in the case of some utilities, and those activities in which some government regulation obviously was desirable for the protection of the public. Banking is perhaps the best example of the latter. But even in banking, except for the First and Second Banks of the

United States, regulation was left to the states until the passage of the National Bank Act in 1863. In transportation the states remained the sole regulatory agency until the adoption of the Interstate Commerce Act in 1887. For business in general the first federal regulation of particular importance was the Sherman Antitrust Act of 1890. On labor all legislation, with one or two exceptions, up until the past few years, was by state governments. And for the protection of the consumer the states were almost entirely responsible until the Pure Food and Drugs Act was enacted in 1906. So it has gone decade after decade, with our citizens supporting the general thesis that there should be no more regulation than necessary, but at the same time always getting ready to approve action by government, either state or federal, in establishing restrictions and regulations wherever and whenever it became evident that only in this way could the public interest be adequately protected.

In this record of regulation down through our history, there has been, as viewed by the public, and regardless of various arguments to the contrary, one guiding principle. This is that the purpose of the regulation was not to curtail needlessly the freedom of the individual by freezing harmful and unnecessary rigidities into the system. This is shown by the fact that when the public has found that there was needless restriction it has reversed the action and repealed the statute. In other words, the public has not regarded regulation as establishing a principle of government management of private enterprise. For example, having the government step into such fields as road building, schools, the post office, and in some instances public utilities, has been in the hope that such centralized direction and control would confer greater benefits than were being obtained under private ownership. They have been examples of attempts to increase the nonmonetary income of the American public, rather than attempts to undermine the driving motivation that comes from a system of individual enterprise.

*Government regulation and public enterprise have not been accepted as steps toward a socialized economy.*

AMERICAN SYSTEM CONTRASTED WITH  
COMMUNISM AND FASCISM

*Our system is fundamentally contrasted with communism and fascism, since they look to complete centralization of ownership or control, and are based on the principle that the State should be the only vehicle for social organization.*

In summary, then, it is evident, that both in philosophical concept and in practical operation the American Individual Enterprise System stands in the sharpest possible contrast with the dictatorship of communism, on the one hand, or the dictatorship of a corporate state, or fascism, or nazism, on the other hand. Under these systems the individual is reduced to the position of almost complete impotence in the handling of his own affairs. In communism the State owns all productive facilities used for "social production," and a small group makes all decisions as to production and distribution. Through the control of these activities, in combination with equally complete control of wages and prices, the State, or this small group, has the final and absolute say as to what and how much the individual may consume. In the corporate state, whether under fascism or nazism, ownership of property remains in private hands in large measure but its use is regulated in the utmost detail by the State. In practice, therefore, insofar as freedom of the individual is concerned, we find the same situation under this system that we do under communism. Furthermore, under the corporate state complete centralization is necessary for its operation. The political aspect of this is absolute dictatorship, with the individual reduced to the status of a State slave.

In other words, both fascism and communism proceed on the principle that the State should be the only vehicle for social organization; that the lines of social relationship should run from individual to the State, not from individual to other groupings; that the church, labor union, corporation, school, and cultural society should be arms of the State; and that the individual lives to serve the State rather than the other way around.

BOUNDARIES OF STATE CONTROL

*The State is best fitted to serve certain*

Because the State can make its rule binding on everyone, and because it has power of ultimate enforcement, it is well fitted to preserve order, protect the citizenry from



foreign oppression, maintain a contractual system which makes complex dealings between individuals possible, ensure universal validity of weights and measures, lay down rules for public health. The State also is well fitted to conserve natural resources in the interest of the whole population, to check monopolistic practices and monopolistic concentrations of private power, and to establish and enforce fair rules of competition. Probably, too, the State is the best guarantor of mass education which provides a way for discovery and social utilization of the capacities of individuals.

But the sociological characteristics that make the State the logical vehicle for achieving certain social ends limit its functions for gaining other ends. The State, for example, rules by blanket authority. If the law were not one for all men, if exceptions were made for individual cases, then the officers of government would become tyrants and faith in the State would wane. But in ruling by blanket authority the State is unable to make the local social adjustments that are needed to satisfy local needs. In communities as close as 20 miles, wage scales, working conditions, and living habits may vary significantly. The blanket rules of the State can fit these conditions only crudely and in terms of maxima and minima. It remains for individuals and groups of individuals to establish the myriad of relationships that take proper and satisfactory account of these differences.

Since the State influences and affects every person in the community, it has no right to take the risks that other organizations can take. If a company stakes its all on a process or a product and fails, only its managers, workers, and stockholders suffer. The public is likely to continue being served by its competitors and will have no loss to bear. But if the State dominates a market and fails on a process or product, the whole community suffers. There may be no other producer to provide the goods and the whole loss falls on the community, not just upon those directly concerned with and responsible for the failure. For this reason the State is less well equipped to do experimental work than organizations with restricted and specialized responsibilities.

*social ends, such as education, conservation, and protection.*

*But it is ill fitted to serve other social ends, where local differences are involved, risks need to be taken, and freedom of choice is wanted.*



*Nor is the State equipped to organize intimate personal interests, to control opinion, to direct other everyday activities of a complex population.*

*The area and limitations of State control have been ingrained in the American tradition.*

*Observance of the principles of the American Individual Enterprise System has*

The State, since it relies ultimately on the principle of force for its sanctions, is also ill equipped to organize the more intimate and personal interests that require spontaneous and variable expression. It is well equipped to enforce conformity with moral concepts, but not to control personal habits, religious creeds, etc. Neither is the State equipped to control opinion, for men will continue to seek the truth even when the obstacle of force is put in their way.

Thus the State, like other associations, has distinct capacities and limitations as an organizer of society. When it stays within its proper realm, it serves an indispensable function; but when it invades the sphere of other associations, it affords poor service to the community.

In the United States this limited function of the State has been recognized by the public from the time of the foundation of our republic. We have never regarded the State as our master, but always as our servant. The concept of the position of the individual which is found in the philosophy and practice of communism and fascism has been contrary to the virtually unanimous opinion of the American public. We have been a people dedicated to the theory of equal opportunity. It has been our conviction that everyone should receive an education at public expense; that he should be free to enter the occupation of his own choosing; that no one should have the right to deny to another the freedom of selecting his own occupation; that competition is the best device for assuring maximum production; that monopoly is undesirable except in those cases where it clearly will confer a direct public benefit; and that it is the function of government to establish the rules by which we carry on our economic activities and to resist all tendencies in the direction of monopoly.

Our system is based upon the thesis that the individual is an entity in and of himself and in the aggregate is all-powerful. It assumes that the government has the right to exercise only such powers as we see fit in the aggregate to confer upon it. And for the system to work successfully we must be ever conscious that those individuals upon whom we confer the power of government cannot be considered either more wise or more able than other

individuals who are merely a part of the general population. In brief, constitutional government, the Bill of Rights, opportunity, the right to enjoy the fruits of one's labor, and freedom from unnecessary restraint and hindrance in the pursuit of our individual and collective welfare—these are the tenets which for over 150 years have guided the American Individual Enterprise System and have enabled it to confer more benefits upon its members than any other economic system in human history.

*brought more  
benefits to the  
people than  
were ever ob-  
tained under  
any other eco-  
nomic system  
in history.*





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## II

# EVOLUTION OF THE INDIVIDUAL ENTERPRISE SYSTEM

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AS Americans we have become so accustomed to the freedom we enjoy under our form of government, and to the benefits of production miracles, that we tend to overlook the long record of trials and errors by which we have attained our present position. We talk, and frequently even act, as though the ideals and principles under which we have lived and progressed from generation to generation were transplanted bodily from Europe—as though our political structure and our system of individual enterprise were something over and above us as individuals—something which had been imposed more or less full-grown upon us.

Such an attitude, of course, is without any foundation. Neither our political structure nor our system of individual enterprise was “imported” or “transplanted” from abroad. Both are and were strictly American. Their development in this country marked a distinctly new departure—a profound and fundamental advance—in the political and economic conditions under which the individuals of a country live and work together.

Further, our political and economic system is not something over and above us as individuals. If we are to continue to enjoy the blessings of free men we must never lose sight of that fact. Our political and economic system is simply you and I and the millions like us. It is you as you argue with your neighbors over politics, religion, working conditions, foreign policy, and the weather. It is you as you work at your jobs alongside a lathe, behind a plow, or in front of a kitchen stove. It is you as you sit at night and help your boys and girls with their lessons, and as you fret

*Our American system of political and economic relations has developed here, as a distinct departure from other systems.*

*It has not been imposed upon us, nor is it over and above us, but is just our everyday way of life.*

*No individual class or group has superior rights. We all share all rights as individuals.*

and worry and plan for their future. It is you as you sit and read the evening paper, or listen to the radio, or go for a ride in the country, or gossip over the back fence. It is you as you say "the blessing" when you sit down to eat and as you go to worship.

These—the thousand and one things which make "our day, our daily bread"—are the American political and economic system. The President, the members of Congress, the justices of the Supreme Court; the factory owner, the labor leader, the banker; the lawyer, the college professor, the doctor—none of these make America. Because of their position, or their ability, or their training, or their character, they may have greater influence in the making and enforcement of the laws than some of the rest of us, but we others, just as much as they, are the blood and flesh of our political and economic system. Our vote at the ballot box carries exactly the same weight as their vote. Our position before the law is exactly the same as their position. Our freedom of speech, of assembly, of worship, is the same as their freedom. Our right to own property, to make contracts, and to try to better our position is the same as their right. That is the "American Way." That, as someone has expressed it, is what makes the United States "a country where every man is king, but no man wears a crown."

### THE SEVENTEENTH-CENTURY BACKGROUND

*The early settlers knew only a State-controlled economy and limited liberties wrested as grants or privileges.*

But it has not always been thus. None of the seventeenth-century immigrants who came to this country from Europe had ever experienced a system—a way of life—in which trade and industry were not strictly regulated and controlled by governmental authority. Probably few if any of these ancestors of ours had ever even entertained the idea that freedom to choose and follow one's vocation is one of the natural rights of man. They knew and enjoyed certain significant liberties, it is true, but in almost all cases these liberties were the result of specific grants of privileges, or specific limitations of the arbitrary powers of the governing authority. And such liberties almost always had

been wrested from the governing authority by force, or else had to be bought either by money or by labor.

Such was the political and economic background of the earliest immigrants to what was to become the United States. Only by slow degrees did their spirit of individualism develop and manifest itself. How did it happen to develop at all? It owed its development partly to the stern necessities of frontier life, partly to the adventurous nature of the colonists, and partly to the fact that the regulatory authority was so far away and more often than not lax in the exercise of its powers. But before turning to the record of this development and its crystallization into the political and economic structure under which we have become great, let us look in a little more detail at the economic thinking and practices at the time of the settlement of the New World.

*Colonial conditions favored development of individualism.*

### MERCANTILISM

Most of the earliest colonists were merely the servants of chartered trading monopolies created to exploit the new territory. Through these companies their governments attempted to regulate trade in what they considered to be the national interest—in the interest of the motherland. The Virginia Company and the Plymouth Company, for example, were only variants of the pattern of the East India Company and a half-dozen others that were given trading monopolies in various parts of the known world. All derived their inspiration from the old companies of the Staplers and Merchants Adventurers that had originated as early as the fourteenth century.

*Most of the colonists were servants of trading monopolies.*

In other words, these colonial development companies were part of the regulated system now loosely termed "Mercantilism." Under this system, although the specific methods varied somewhat from one country to another, the general idea was to regulate trade and industry in ways that would increase the nation's store of wealth, preferably in coin or bullion. The colonies were expected to become a source of gold and silver, or at least valuable raw material, and to furnish outlets for manufactured goods. The direct beneficiaries would be the investors, or "adventurers," who

*These companies were part of a "mercantilist" system.*



risked their capital, but indirectly the whole kingdom would profit. The commercial motives of the companies, however, were partly cloaked by such pious motives as that of Christianizing the heathen and providing employment for the surplus population of the home country.

*This system was based on the assumption of the absolute supremacy of the State.*

In other words, Mercantilism was a detailed system of national planning designed to promote what was conceived to be the welfare of the State. It was maintained that only by such planning could the nation be protected against the difficulties that were certain to develop if individuals were permitted to follow their own bent. Only by limiting the freedom of individuals could the nation be protected, and this could be done only by having the governing authorities formulate a general plan and make it effective by the necessary regulations.

*It was accepted generally.*

Now, strange as it may seem to us today, the evidence does not indicate that the early colonists sent here by these trading monopolies had any quarrel with this system. The Pilgrims and Puritans, to be sure, were seeking a place where they would be free to worship in their own way. But they, as well as the Virginia colonists, were accustomed to regulation by authority in domestic trade and industry. Not since the Norman Conquest, for example, had the ordinary Englishman been free to engage in whatever occupation he might prefer, and in England opportunities were better than in most European countries.

*In "free towns" similar restrictions on individuals were adopted.*

Further, it should be noted that the struggles and rebellions against authority that had occurred in England and elsewhere were not against regulation as such, but against regulators whose policies and acts were found to be intolerable. The citizens who obtained trading rights and control of the markets in the free towns adopted the same kinds of restrictive regulations that had been enforced by the lords. Through their guild organizations they sought to monopolize the economic privileges they had gained, and they exacted heavy payments, in money or labor or both, from outsiders who sought admittance to any trade or craft.

In other words, throughout the medieval period, and even after the discovery of the New World, practically everyone accepted the idea of a static universe, with defi-

nately limited, inelastic markets. Whatever share of business one craftsman gained meant just that much less for a fellow craftsman. Changes, or "innovations," particularly in sales methods, were regarded as undesirable. Society was permanently stratified, and each person was supposed to continue in that estate in which he was born. True, there were always some individualists who refused to accept their lot, and some of these contrived to evade the regulations. In consequence, the authorities were always plagued by forestallers, engrossers, poachers, smugglers, and worse.

But the rank and file accepted the regulation and the system as generally desirable and better than any alternative. It is true that when the Tudors and Stuarts extended the scope of crown authority to the regulation of trade and industry on a national scale their "innovations" provoked some resentment. By diplomacy, Elizabeth and James I managed to avoid an open rebellion, although the latter escaped only by admitting that some of his regulatory efforts were mistakes. Charles I, however, was stubborn as well as misguided, and beyond question his attempt at strict personal regulation of trade and industry was one of the factors leading to his downfall.

The downfall of Charles I carried with it a substantial part of the bureaucracy of sealers, inspectors, and other regulators who had to be supported by productive workers and were burdening internal trade under the pretext of supervising price and quality. The private royal monopolies largely disappeared. Most of the companies in foreign trade, however, managed to retain their prized privileges in modified form. These companies had never been so unpopular as the domestic monopolies, such as Charles' own monopolies of everyday necessities. Nevertheless they always had opponents who advocated freedom of trade. These opponents became increasingly outspoken in the seventeenth century. And there always were some independent merchants who operated illicitly as "interlopers" in monopoly territory, as shown by the fact that as early as 1622 King James issued a proclamation prohibiting "interloping and disorderly trading to New England in America."

*Permanent stratification of society was the rule.*

*Revolts were against too arbitrary rulers rather than against the system.*

## COLONIAL EXPERIENCE WITH ECONOMIC REGULATION

*Absentee ownership of colonies was gradually lifted.*

Unlike most of the earlier trading companies, the Virginia Company was not a financial success. In fact it probably could not have survived if it had been continued on the original plan of communal operation. Only after the settlers were permitted individual ownership of land, and began to raise the tobacco that King James detested, was it able to maintain itself without further subsidies.

The Plymouth Colony likewise abandoned communal ownership after a short trial, and adopted individual ownership of land with better results. This colony also failed to yield profits to the parent company, and the settlers ultimately bought out their financial backers for a smaller amount than had been advanced.

Most of the later colonies were the personal ventures of wealthy men who had obtained large grants of land from the Crown and sold it on credit terms to the colonists they could induce to migrate to the New World. Most of these colonists were persons with little or no capital. Many came as indentured servants, virtually slaves until their term of servitude had expired.

*The colonies themselves found strict regulation of trade and industry difficult.*

Several colonies attempted to regulate trade and industry in the same way as in England. Prices and wages were fixed. The regulations, however, were difficult to enforce. Land was plentiful and cheap and labor was scarce. In the Southern colonies, the importation of black slaves from Africa provided a temporary solution. In the North the settlers relied mainly upon their own efforts and those of their numerous progeny. The typical Yankee became a Jack-of-all-trades. The fishing industry along the New England coast was a breeding ground for traders, who soon found the West Indies a profitable market for fish and other staple foods, and a source of sugar and molasses.

*And enforcement of regulation by the Mother Country led to successful revolution.*

Much of this trade with the West Indies was illicit from the start, and laws subsequently passed would have seriously limited the remainder if the laws had been strictly enforced. But by 1763, when enforcement was seriously attempted, it was too late. And if the English government could not prevent smuggling by its own people in Devon and Cornwall it could hardly hope to prevent it in the



colonies. Probably less than 75 per cent of the inhabitants of the English colonies were then of purely English descent, and few of these had ever seen England. The story of the gradual resistance to England's attempts to regulate colonial trade and industry for the benefit of the Mother Country is too well known to need repetition here. It ended in the successful War for Independence, which was, in essence, a rebellion against the Mercantilist policy of regarding colonies as merely instruments to be manipulated for the benefit of those who continued to live in England.

### ECONOMIC FREEDOM DECLARED AND WON

The Declaration of Independence, however, was more than a document of rebellion against constituted authority. It expressed a new philosophy of society—that the rights of men were paramount to arbitrary authority of government.

The successful outcome of the Revolution freed American trade and industry from the direct regulation of the English government. But the merchants and ship-owners soon discovered that their activities were still limited by the old mercantilist policies of the Continental countries. Their profitable trade with the West Indies—French and Spanish as well as English—was legally shut off. In this emergency, Yankee enterprise was forced to find a new outlet, which it did by developing the China trade. Later, the Napoleonic wars gave further stimulus to the merchant marine as a neutral carrier. Although this involved many international complications and a second war with England, it eventually placed the United States among the foremost maritime powers. During the first half of the nineteenth century her clippers were the fastest and finest sailing ships in the world. Even though the iron steamship was destined to supplant the wooden vessel, it is possible that the United States might still have retained her position of leadership on the seas, if her energies had not been turned in the direction of developing internal transportation and manufacturing.

Manufacturing in the colonies, of course, had been restricted by the English laws which forbade any industry

*The Declaration of Independence included individual freedom among the rights of men.*

*American traders established their freedom in the Napoleonic wars.*

*Meanwhile there were few factories in America, but a start was made in some manufacturing fields.*

*Yankee enterprise showed itself in aggressive salesmanship.*

*This led eventually to mass production in the clock industry.*

that might compete with those of English cities. Much domestic manufacture of coarse textiles and other articles was carried on, of necessity, in the colonial household, but there were few factories. In 1789, Samuel Slater, an ingenious youth with a retentive memory, brought from England the knowledge of spinning machinery, as detailed as a set of blueprints, and established a successful textile factory in Rhode Island. In Connecticut a number of ingenious craftsmen were making tinware, brassware, clocks, and other articles. However, most industries were handicapped by a dearth of machinery and skilled labor. Yet even before 1800, Eli Whitney had invented the cotton gin, which brought prosperity to the South, and had demonstrated the principle of interchangeable parts, which paved the way for the American system of mass production.

Various industries provide good examples of one aspect of Yankee enterprise that has never received its just credit; namely, the adoption of aggressive sales methods. Some American manufacturers refused to accept the theory that markets were inelastic. When the immediate demand for their products was insufficient to absorb their production they went out and created customers. Among the pioneers in this movement were the tinware manufacturers of Berlin, Conn. From this beginning arose the tribe of tin peddlers who penetrated to the most remote outposts of civilization. In their wake followed peddlers of many kinds of commodities, spices and drugs, notions, and so forth. Afoot, on horseback, or in carts, these bold and shrewd dealers brought their various wares to American homes everywhere, despite the barriers of distance and bad roads.

The clock peddlers were of a slightly different kind. At first, the clockmaker himself went out on horseback as Eli Terry did about 1800. Those who followed were usually the manufacturer's own agents, and they concentrated on this one item, with the object of placing a clock in every farmhouse in the country. Some established branches in Southern cities where clock parts brought by water were assembled. The increasing sale of clocks paved the way for Chauncey Jerome's use of automatic machinery and interchangeable parts in the large-scale production of clocks. The sales methods provided a crude pattern for the specialty

salesman of cash registers, carpet sweepers, vacuum cleaners, and other laborsaving appliances of later days.

### THE CONSTITUTION SETS OUR ECONOMIC SYSTEM

But we are getting ahead of our story. The Revolution, which had been fought to gain greater commercial freedom, left the country in many respects in a worse economic position than before the revolt. Instead of the blessings of freedom there were political chaos, economic disorganization, and a legacy of foreign debt. The infant war industries were discontinued, and the importation of cheaper products from England had a serious effect. The earlier markets were cut off. The federal government, under the Articles of Confederation of 1781, did not have the power to levy taxes or regulate commerce. The states began to erect tariff walls against one another, and in response to public clamor were issuing their own paper money. Under the threat of political, economic, and social dissolution, a movement was started for a stronger federal government.

The Constitution of 1787 was the answer of far-sighted Americans to the deficiencies of the Confederation. With its Bill of Rights, which was added to it in 1791, our Constitution has been justly revered as one of the great political documents of all time. In its spirit it is a document of economic liberty as well as political liberty. Under it the individual, rather than the State, was selected as the object of the new policy. His liberties were enumerated and protected from encroachment, especially by government. The sanctity of contracts was affirmed. An individual's property could not be taken from him—not even by government—except through due process of law and with just compensation. To each individual belonged the product of his own efforts and the right to exchange that product for the product of others.

These principles are the essence of a system of individual enterprise. Through them came the implication of two great incentives to each individual of the community: hope of reward and fear of loss. Since each man was entitled to the fruits of his own efforts, he who failed to produce—

*Economic chaos after the Revolution showed need of stronger government.*

*The Constitution recognized sanctity of contracts, private property rights, and limits of State control.*

*The protection of individual enterprise and of free competition was assured.*



*Incentives were offered to maximum effort.*

"produce" in the broadest sense of the term—could not better his condition by depriving others of the fruits of their efforts, either directly or through the power of the State. The application of those incentives to each separate individual thus created the environment which called forth the maximum capacity of all the people. Under the Constitution the principle of competition was assumed, for, if individuals were free to dispose of their energies and resources as they saw fit, then no man could deny to another the right to engage in similar enterprise. The enterprise which produced a product favorably received by the people thus attracted competition; the enterprise which failed to serve the people was liquidated. Under the Constitution, therefore, competition became both the guardian of efficiency and the guarantor of progress.

#### INDUSTRY FORGES AHEAD

*Confidence in stability of government was an added stimulus to business.*

Now let us look at some of the more important phases of our economic growth. As previously noted, the conduct of business was hampered by an inadequate currency system. Under Alexander Hamilton's supervision, the currency system was reorganized on a metallic basis, and in 1791 the First United States Bank was chartered for 20 years. In the meantime, Congress, under authority given it by the Constitution, passed the first tariff law in 1789 and imposed various excise taxes with a view of establishing a sound fiscal system. These Hamilton policies and the confidence in the central government among the business groups made a substantial contribution to better business conditions.

*The interruption of foreign commerce in 1808-1815 spurred American manufacturing and speeded the introduction of the Industrial Revolution.*

The War of 1812 caused a temporary setback to the growing merchant marine and increasing commerce. But at the same time it afforded an impetus to manufacturing which introduced into America the Industrial Revolution and laid the foundation for our subsequent industrial expansion. England had a half-century's start over the rest of the world in factory production. But this situation was radically changed by the Embargo and Nonintercourse Acts and the War of 1812. The shutting off of imports created a demand for home products. The existence in

America of an abundance of fuel, waterpower, iron, lumber, cotton, and other necessities solved the problem of raw materials, while the scarcity of labor and capital in relation to our natural resources made for enterprise and ingenuity.

Development of adequate transportation facilities has been one of the chief problems—and accomplishments—of our history. The growth of cities, the concentration of industry, large-scale production, foreign trade, the development of modern economic and social life have been brought about by improvements in transportation.

In the last decade of the eighteenth century, the "turnpike era" was inaugurated. This was followed by an era of rapid canal building, which extended approximately from 1812 to 1837, and involved the financial participation of many states and towns. Then, with the invention of the steam locomotive and the continued demands of commerce, the railway net spread rapidly through the United States, supported by lavish land grants from the federal government and the states.

Between 1850, when the federal government inaugurated its policy of land grants to railways, and 1872, when the policy was discontinued, more than 150 million acres were placed at the disposal of the railroad corporations by the federal government.

As to industry, according to Prof. Bogart, the year 1808 may be taken as a demarcation line to distinguish the period of industrial dependence of the United States upon Europe from that of increasing self-sufficiency and rapid internal development. The scarcity of labor in relation to natural resources delayed American manufacturing in its earlier stages, but, as noted earlier, it encouraged introduction of laborsaving devices. Another important factor in the delay was the predominance of agriculture. Because of this a large part of early manufacturing consisted of the preparation of agricultural products for the market, such as flour milling, meat packing, and leather tanning.

In the late nineteenth and early twentieth century, through the ingenuity and ability of our business leaders, what may be termed the "Second Industrial Revolution" was inaugurated in the United States. With the exploitation grew discoveries and inventions, with a host of remarkable

*Improvements in transportation were an important factor.*

*The turnpike was succeeded by the canal, the canal by the railroad.*

*Increasing industrial independence and internal development, after a generation of delay, were evident in the years following 1808.*

*And by 1890 a Second Industrial Revolution had got under way.*

technological improvements, and with the introduction of assembly-line principles and mass output, the United States was transformed in terms of output into the leading industrial nation of the world. It was during this period that the petroleum, electrical, automotive, chemical, rubber, machinery, motion-picture, and radio industries were developed.

#### GOVERNMENT AID AND LAISSEZ FAIRE

*Government aided industry by its tariff policies, which were increasingly protective after 1860.*

From the introduction of the Industrial Revolution into the United States, stimulated by the Napoleonic wars, the attitude of the government had been favorable to industrial development, the chief artificial legislative stimulant being the system of protective tariffs. The first tariff act had been passed July 4, 1789. It levied only low duties, chiefly for revenue purposes; but after the war of 1812 rates were raised for effective protection, until, by the law of 1828, the high-water mark of protective legislation before the Civil War was reached. Some of the "abominations" of this act were removed in 1833. Under a new Democratic administration in 1845, the whole tariff structure was revised with a view of making it less a protective measure. The trend, however, was comparatively short-lived. Beginning in 1862, higher duties were again imposed, first in order to increase the federal revenue, but later chiefly to foster various home industries. Rates thereafter continued high, with some adjustments in 1872, although in the McKinley Tariff Act of 1890 the idea of reciprocal trade agreements was introduced with a view of getting nations to cooperate in a reduction of rates. Then, around the turn of the century, the conviction began to grow that the tariff was largely responsible for the growth of large combinations. This popular disapproval resulted in the passage of the Underwood Act in 1913, which made a substantial reduction of rates. With the return of the Republicans to office in 1921, however, rates again were revised upward, and in the following year this "emergency tariff act" was replaced by the Fordney-McCumber Act, raising the level of duties. In the Hawley-Smoot Act of



1930, the average rate of duties was again substantially increased.

In spite of the tariff and various other legislative actions affecting our economy, it remains true that the development of the nation has been closely identified with the economic doctrine of *laissez faire*. This doctrine has been well summarized by Edwin G. Nourse as follows:

1. As to government, let its activities in the field of business be limited to the very minimum necessary for the maintenance of property rights and peaceful life.

2. As to business, let the system of private capitalism grow naturally under free enterprise, and the law of supply and demand will operate automatically to establish the right prices. Commodity and service prices will reflect the lower costs resulting from progress in technique and organization. As for wages, they will reflect the productivity of each worker. Economic activity will be guided by such prices into the most productive channels and thus promote to the fullest possible extent the national prosperity. These principles were conceived as embodying universal truth capable of achieving "the wealth of nations" and the welfare of the masses.

A policy of *laissez faire*, practically, does not mean unrestrained economic freedom. And it does not mean that government should not pass safety and health legislation, nor enact statutes designed to protect the public against fraud. It means merely that there should be no legislative interference with the competitive price system; that special privileges should be prevented, and reliance should be put upon competition. Such has been the philosophy under which as a nation we have grown great. That errors have been made in attempting to follow this path—errors of both omission and commission—is too evident to need emphasis. But, by and large, and taking our history as a whole, the system has given amazing results, more amazing results than any other system or economic philosophy yet devised by man.

*But under this protection industry was given a large measure of laissez faire.*

*Laissez faire, however, was not interpreted to mean anarchy.*

#### SIGNIFICANT FEATURES OF OUR ECONOMIC DEVELOPMENT

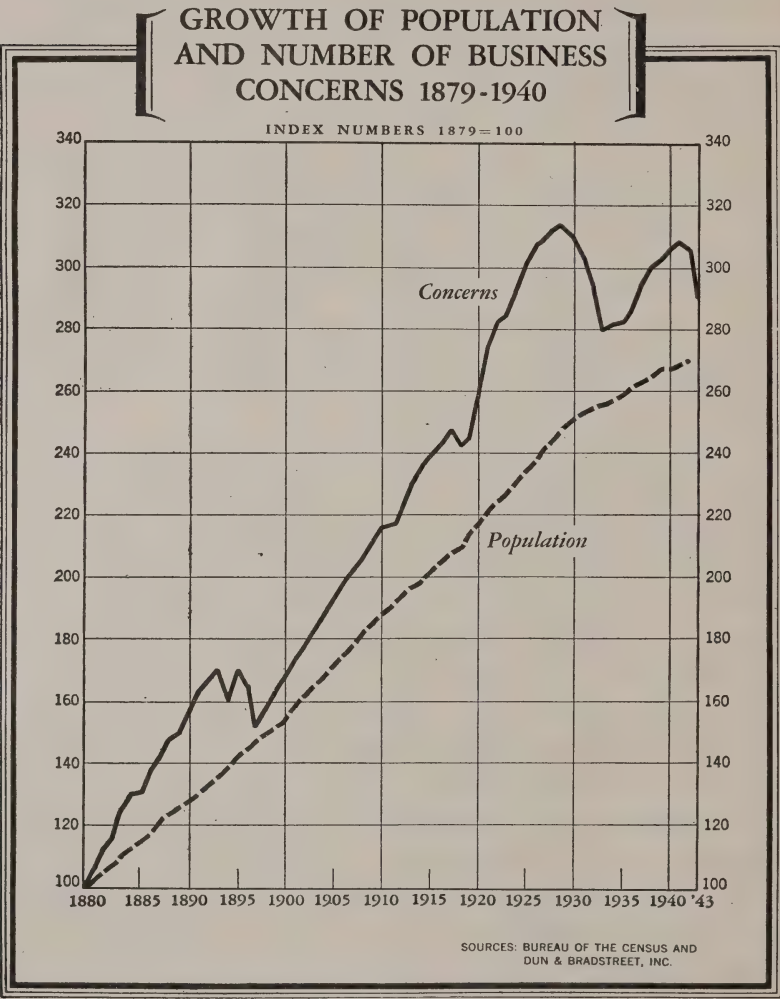
So much for some of the broader aspects of the historical development of the enterprise system. Let us now turn to four specific points which, because of the frequency with which they arise in current discussions, are worthy of

*Four important features of our economic development*

*call for special discussion.*

special notice. These are (1) changes in the size and number of business units in the country; (2) the relation of large business units to our economy as a whole; (3) the financing of business; and (4) the effects of technological improvements upon the production of goods and employment.

*Chart I*



*1. The number of business units has increased faster*

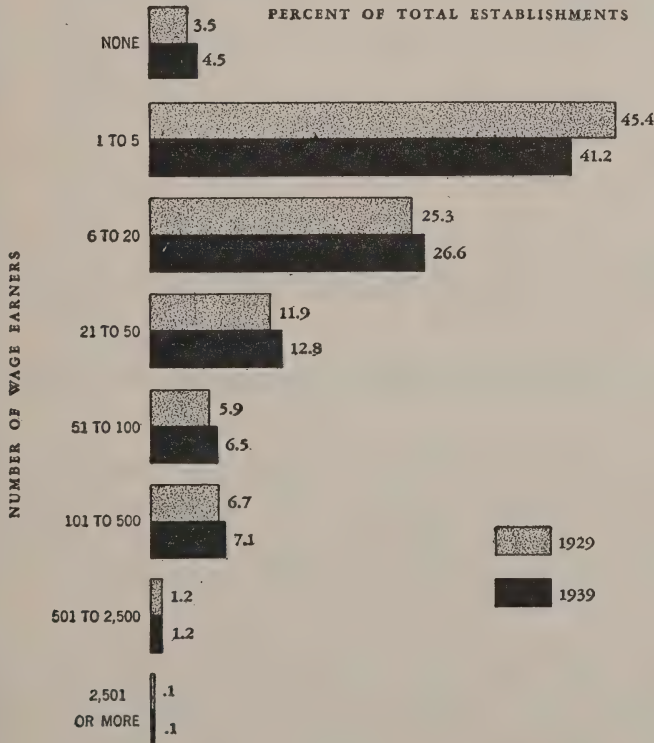
*1. The Size and Number of Business Units*

It frequently is said that the United States is a nation of large business. This is true only in the sense that over the years we have developed extraordinary business organizations in various lines of endeavor. These large units, how-

ever, have not been typical of the American business system as a whole. Quite the contrary. Throughout our history the overwhelming majority of our business units have been small, and that continues to be as true today as it was a hundred years ago. In Chart I the increase in the total number of business concerns in the nation is compared to the growth of our population. It will be noted that throughout the period for which we have statistics the number of business firms has, with the exception of depression periods and especially the last 10 years shown, consistently increased more rapidly than the population.

*than the population through most of our history.*

### MANUFACTURING ESTABLISHMENTS CLASSIFIED BY NUMBER OF WAGE EARNERS

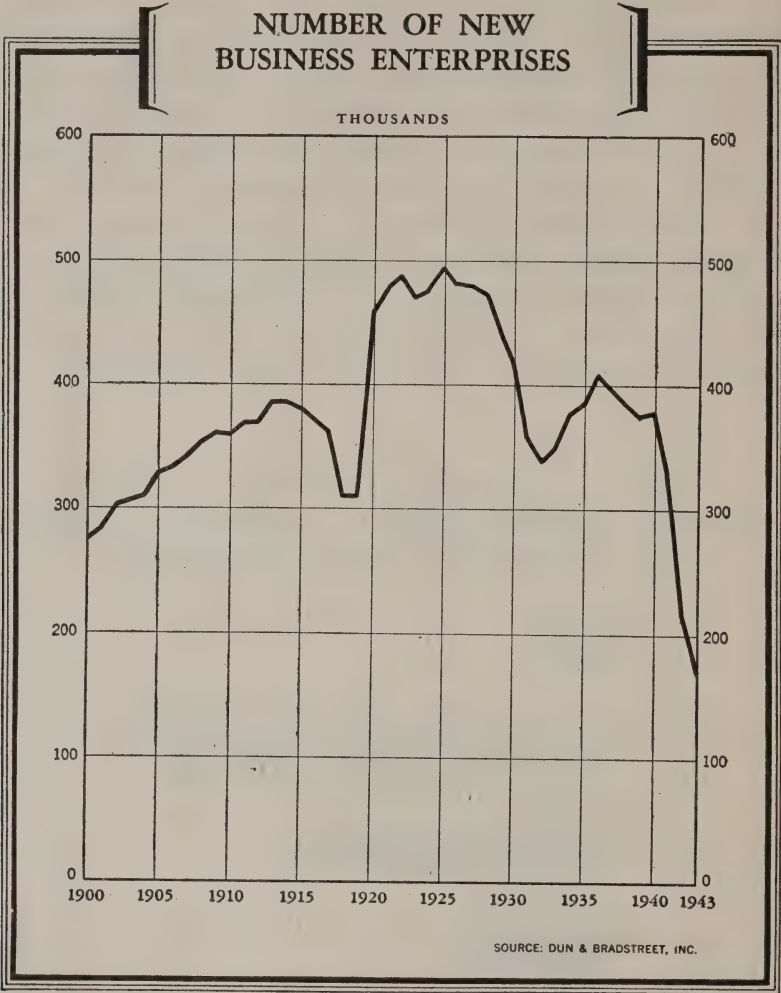


SOURCES: U. S. BIENNIAL CENSUS OF MANUFACTURES

*Chart II*



Chart III



Even more impressive, as showing the numerical pre-dominance of small business in the American individual enterprise system, is Chart II based upon the number of employees per manufacturing establishment in two recent years.

One of the effects of this continued numerical pre-dominance of small business units in our economy has been to encourage the development of new enterprises. Every year thousands of people risk their savings and time in the organization of new businesses in the hope of improving their position. Unfortunately data on the number of new

enterprises go back only to 1900. This is shown on Chart III. It is worthy of note that, while the number of new organizations started each year fluctuates with the ups and downs of business activity, there was an over-all continuous growth until about 1925. Since then there has been a marked falling off, and in 1940 there were 100,000 fewer new organizations established than there had been 15 years earlier.

Unfortunately a substantial percentage of new business ventures do not prove successful. There are many reasons for this, but among the most important may be mentioned:

Bad management	Exorbitant labor demands
Bad location	Governmental restrictions
Insufficient capital	International disorganization
Poor products	Attempting to cover too
Inefficient production	much territory
Ineffective marketing	Inadequate accounting
Depressed business conditions	Bad planning

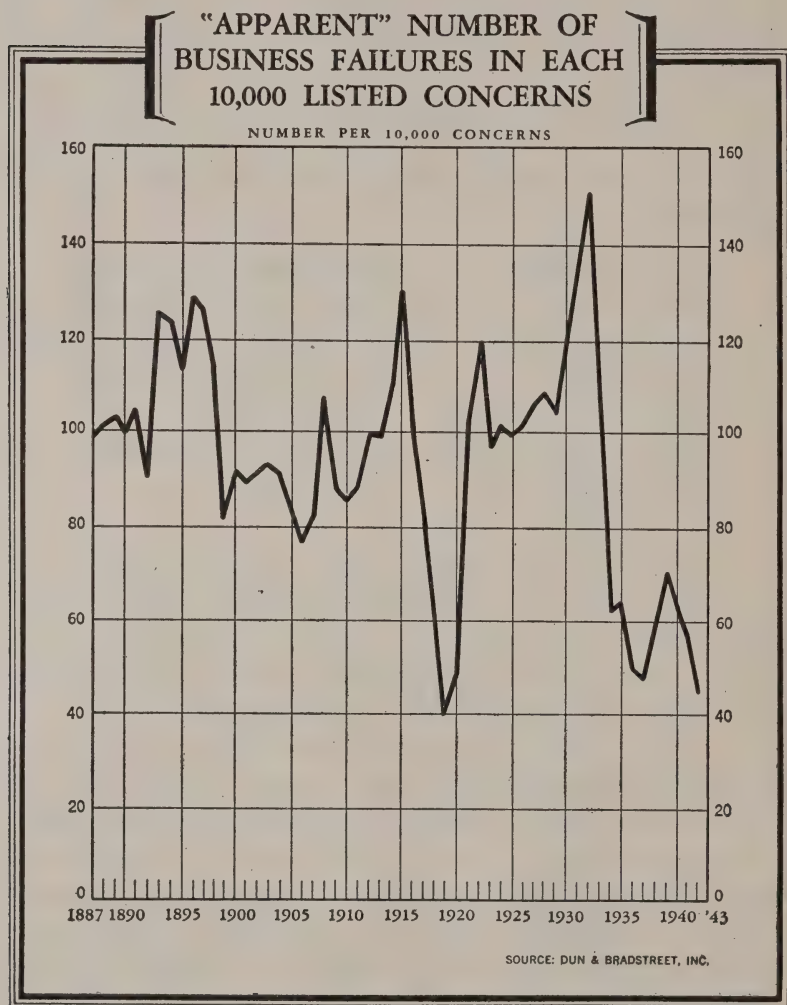
In many cases, perhaps in most cases, more than one of these elements have contributed to the failure, and it is useless to attempt to assign a relative importance to each of the 13 items. Chart IV gives the record of failures from the middle of the last century to the present.

There is another aspect of the failure record in the American individual enterprise system which deserves attention. This is that, although the failures are unfortunate to those concerned, they are not all a net loss to society as a whole. Rather, the failures are a reflection of the continuous selective processes by which the less efficient units in our economic system tend to be weeded out in favor of those organizations and managements which succeed in meeting the needs of the public. Such a cleansing process does not take place under a system of government ownership. That is one of the reasons individual enterprise has proved so superior to government ownership. In other words, the constant search of individuals and organizations for new and better products, which results necessarily in the failure of many enterprises, serves constantly to direct economic

*Failures are not a net social loss, but a reflection of continuous selective process essential to economic progress.*

effort to the performance of those functions which are most desired by the public. Obviously, therefore, it is unwise public policy to attempt by legislative means, or through subsidies, to attempt to stop this selective process.

Chart IV



## 2. The Relation of Large Business Units to the Economy

2. "Big business" is usually a result of good management,

In the course of the operation of this selective process and because of our population growth, the broadening of our markets, and the increased mechanization of production, some business units have enjoyed a phenomenal



growth. In some instances in our history this growth has been based upon governmental favoritism and what today are regarded as "unfair business methods." These instances are regrettable and cannot be condoned. Fortunately, the companies which became large because of these factors have been exceptions to the general rule. The development of our large companies has been, in the majority of cases, the result of good management, a cooperative labor force, adequacy of capital, and increased efficiency of production. Their growth, thus, has not been a hindrance to small companies and has not been a deterrent to the starting of new enterprises. As already indicated, small companies have maintained their relative position in numbers, decade after decade, more or less throughout our history. They do not produce so large a percentage of total output as formerly, but, except for various government impositions and restrictions, the opportunity for new business is just as great today as it was in the past before there were any large companies in the modern sense.

The mere existence of these large business units in our economic system, it should be further noted, has not meant, either necessarily or usually, the existence of monopoly. A comprehensive survey upon this point has been made by the government itself as a part of the investigation of the Temporary National Economic Committee. From that study it is evident that large companies do not eliminate the competitive ability of small companies. Our large organizations are not great aggregations of capital, labor, and management used for the production of a single commodity. Rather they are aggregations of capital, labor, and management which are devoted to the production of a large number of commodities. And, although it is true that a small producer—that is, small in relation to the industry—may not be able to compete successfully over the whole range of commodities being offered by the largest company in the field, he may have a distinct advantage in the production of one or more of the commodities, or in its distribution within a limited area. His advantage may be in the form of flexibility of management, adaptability of plant, lower transportation cost, lower overhead, flexibility of wages, quality of product, or any others of the

*cooperative labor, adequate capital, and increased productive efficiency.*

*Nor does it eliminate competition, as various studies and the record have shown.*

other numerous elements that enter into the successful operation of a small concern. The proof that these advantages are genuine is found in the thousands of specialized companies which develop in competition with or in collaboration with the big companies and go on year after year enjoying a high degree of success.

In most instances also big business in no sense is hostile to small business units. On the contrary, in the majority of cases the very existence of the large organizations is dependent upon the markets resulting from the buying of small business units; in many cases, too, upon the supplies furnished from such sources. It is to the interest of big business, therefore, just as much as it is to the interest of the public at large, to assure that there will be no stifling of small business organizations.

Why, then, in view of these facts, have we had the development of so many large business units in our economic system? The answer is that, while in some instances the primary motive has been the profits to be made from such financial promotion, in the majority of cases the development is to be credited to an attempt on the part of the managers and owners of these organizations to gain profits by reducing unit costs and prices, and thereby sell more goods, or, that is, to develop an increasingly efficient organization.

*The optimum size of a business for maximum efficiency varies with its character, and size is no indication of degree of competition.*

How large a company should be to gain maximum efficiency is not something which can be determined with accuracy beforehand. The optimum size varies from industry to industry. There may be, and frequently is, a minimum size below which production on an efficient basis is impossible. For example, in the case of an automobile manufacturer, it appears that unless he can turn out at least 5,000 units a year he will be unable to meet the competition of the market place. This conclusion is indicated by the fact that every automobile producer who has been unable to meet this production schedule has failed, or else has had to be taken over by some other company. In steel production also there is a minimum below which the cost of production of a fully integrated plant probably would become prohibitive. A minimum capacity of such a plant might perhaps be set roughly at about 500,000 tons of

ingots per annum. This would call for a capital investment of about 60 million dollars. At the opposite extreme are such activities as grocery stores and tailoring establishments. Here only a few hundred dollars may be necessary to enter the field.

And so it is throughout our whole industrial structure. In some fields a company which is small as compared to its competitors has to have more capital than the largest company in some other field. This does not mean that competition is less in the one case than the other. Rather, it means merely that for successful operation there are certain conditions as to capital and equipment which must be met and these vary from one industry to another. If these conditions are met, the field is wide open and determination of the most successful unit becomes a matter of managerial judgment, productive efficiency, and effective marketing.

Certain parts of our individual enterprise system, in other words, are conducive to and in fact necessitate large organizations. These conditions, to repeat, vary from industry to industry and it is not possible to present a list which is either all-inclusive or applicable to all parts of our economy. In general, however, it may be said that for a manufacturing company to become large in a mass-market operation four conditions are essential. These are:

- (1) A large volume of fixed capital to produce even the first unit of product
- (2) The possibility of a substantial degree of standardization of product
- (3) A large potential market
- (4) The possibility of reducing the productive process to a repetitive basis through division of labor and mechanization

*Generally four conditions are essential to successful development of large industrial companies, related to capital, standardization, market, and productive process.*

Most of our large companies are in fields in which all these conditions are present. Steel, automobiles, and ships provide good examples. Conversely, when these conditions are not present the characteristic unit remains small. In the building trades, for example, it is not essential to have a large capital investment per unit of output, the product in



many respects is completely unstandardized, the market generally is almost entirely local, and the individual workmen for the most part have to exercise a substantial degree of judgment and discretion in the performance of their jobs. As a result almost all the companies in this field are small. In agriculture there is a large capital investment per worker, and for many commodities there is a world-wide market, but the work cannot be reduced to a repetitive basis to the degree that is possible in a highly mechanized factory. In consequence the characteristic producing unit here is small. The clothing industry cuts midway between two extremes, and we find many fairly good-sized organizations, but alongside them are scores of thousands of owner-operated shops, or shops employing only a handful of workmen.

*Competition may prevail as well among a few as among many companies, and size does not determine extent of competition.*

The degree of competition found in these various fields depends upon many factors. In other words, competition is not necessarily related to the size or the number of producing units. There may be the most bitter kind of competition with only two producers in the field. Conversely, because of trade agreements, or market allocation and price fixing by government direction, there may be no competition on prices with thousands of producers turning out identical products. In the automobile industry of this country, in which there are only a few producers, there is competition of the most intense kind—in prices, on quality, and on style. In fact there is even direct and open competition in some cases between the products of the different producing units of the same company. The same thing is found also in the chemical industry, and to some extent in the steel industry. In certain branches of the building trades, in contrast, the scope of competition is insignificant because of a rigid standardized labor cost. In summary, one may say that unless some one company becomes so large as to have a virtual monopoly and thus dominate the market, size is one of the least important factors determining the extent of competition.

The legal setup of a business organization is equally unimportant as a factor having any necessary relation to competition. Whether a concern is a corporation, a partnership, or an individual proprietorship makes no difference

in this particular. It is true that with the development of large organizations the corporate form of business has become relatively more important, but the adoption of this form has not in and of itself given these companies an inherent advantage.

### 3. *The Financing of Business*

In the early days of our individual enterprise system, most of the financing of business came from (1) the savings of the owners of such businesses and their immediate friends, (2) the plowing back of earnings, and (3) such help as they could get, usually on short-term loans, from commercial banks. In due time, however, a capital market developed which served the function of bringing businessmen and investors together. This did not mean that business ceased to finance itself. Quite the contrary. Even during the period 1924 to 1929 when our capital markets were most active, we find that of a total new investment of about 95 billion dollars some 40 billion dollars came from the plowing back of earnings, or the internal savings of business, and 55 billion dollars from the capital market. More recently, the government has stepped into the financial field to an increasing extent and through the Reconstruction Finance Corporation, the Federal Farm Mortgage Corporation, and various other agencies has assumed an ever-growing part in the provision of funds—which of course it has to get from taxes or borrowing—for the individual enterprise system.

The reasons usually assigned for this increased governmental participation in the financing of the American individual enterprise system are (1) that private investors have been unwilling to take risks to the same degree that they formerly did and (2) (obviously inconsistent with the first reason) that there is no longer so wide a range of opportunity for private investment as in earlier years and, consequently, the public has been hard pressed to find places to invest its money, even if it were so inclined.

Both of these explanations are largely fallacious, except to the extent that government action has given them substance. Except for artificial handicaps there is

*3. Financing of business may come from personal savings, plowed-back earnings, commercial banks, or the capital market. Lately government also has participated.*

*Government participation tends to inten-*

*sify the reasons assigned for it. And private financing, which is voluntary, is deterred by burdensome taxation, extensive regulation, and apparent government hostility.*

ample opportunity for private investment in the United States today, and we may be sure that, other things being equal, the American investor would be just as willing to risk his savings now as a generation ago. The difficulty is that other things no longer are equal. Because of the present burdensome tax system, extensive governmental regulation, and what to many people has appeared to be general hostility on the part of the federal Administration toward individual enterprise, many private investors have been loath to risk their funds. Individual enterprise, it must always be borne in mind, is inherently voluntary. It depends for its motivation upon the interest of the individual stimulated by the hope of reward. The initiative in a new undertaking generally lies with a person who has an idea, and there must be a meeting of minds between him and the investor, frequently through the cooperation of an investment banker, before funds can be raised to convert this idea into actual production. In recent years, for the reasons just cited, there has been less of this initiative and less inclination on the part of investors to put their funds into new enterprises.

This curtailment of activity has been a serious handicap to our economic system as a whole, and especially so in the case of new and small business. In other words, although well-established organizations could continue operation if they so desired, small establishments which had not yet got into their stride or had little reserve strength and those persons with an idea who were trying to get started have been enormously handicapped. In many instances, because of heavy taxes, regulations of the Securities and Exchange Commission, general uncertainty about the future, and other conditions, small businesses and new enterprises have found it extremely difficult to get funds at any price, or to make investments with any real hope of gain.

#### 4. *Technological Improvements*

*4. Technological improvements increase workers' pro-*

The beneficial effects of the mechanization of industry, or technological progress, which is made possible by increased capital investments, reach throughout our economic system. It increases the output per worker by placing



in his hands machines that immeasurably increase his power and variety of work. It does much to eliminate the drudgery of labor by the use of machinery to do many of the unpleasant jobs that formerly could be performed only by hand. It increases the leisure time for the worker by so enlarging his productivity per unit of time that it is possible for industry to pay him a living wage for a smaller number of hours. It makes possible an ever-widening list of commodities available for general consumption. And, by lowering production costs, it brings about such a reduction of prices for thousands of articles that it may truly be said that the luxuries of one generation become the necessities of the next.

However, there is another aspect of the problems of technological progress that needs attention. This is the question of its effect upon employment. Usually this aspect of technological progress is thought of as referring only to labor. Actually it applies equally well to capital. Many, if not most, technological improvements impair or destroy, through making obsolete, the value of some already existing capital. But it is the effect of technological improvement upon the employment of labor that has caused most concern; so let us concentrate our attention on that aspect.

The first point to note is that a technological improvement not infrequently, for the moment, throws men out of work. This is because in many instances the purpose of making a technological improvement is to reduce the cost of production, and one of the major elements in cost is wages.

But that is only a first result. In the long run the effect of a technological improvement may be, and in fact will be, if there is no unnecessary restraint, or, in other words, if there is freedom of competition, exactly the reverse. The technological improvement means lower cost of production. This reduced cost in turn means there is a "dividend" to be distributed. Under monopoly this dividend may take the form of higher profits for the owners of the business; but under competition this is possible, at most, to only a limited degree. Rather, under competition, the dividend constantly tends to be distributed in three possible ways: (1) we may have more products of the same

*ductivity, permit higher wages for shorter hours, and reduce prices to consumers.*

*They may impair or destroy already existing capital, and temporarily throw men out of work.*

*But, in freedom of competition, they yield dividends in more products at lower prices, less work for same volume of output, and release of energy and other factors*

*for developing new products; and the total volume of production and employment is increased in the long run.*

kind at a lower price; (2) we may have to work less to get the same volume of products; or, (3) we may, by using the energy and purchasing power released by the improvement, develop new products.

In a smoothly running enterprise system we get some of all three of these effects. The technological improvement causes prices to be lowered, and therefore more of the old products are sold and new products are brought into the market. It is quite possible, as witnessed in thousands of instances in this country, that as a result of technological improvements the total volume of production is increased in the same industry and leads to a greater aggregate employment. Actually, the only cases in which this does not happen, and will not happen in the future, are when as a result of the improved efficiency of production workers demand proportionally shorter hours for the same wage and thereby absorb the entire saving resulting from the improvements. In such a case there is no increase in the volume of employment because, since costs of production are not reduced, no more of the product will be sold and there is no need for additional labor. In this instance the whole benefit of the technological progress is devoted to increased leisure time for the immediate workers concerned instead of being passed along to society as a whole through increased production, lower prices, greater employment and greater leisure for all.

*If we have adequate capital accumulation, an atmosphere of business confidence, and opportunity to pass along the benefits of efficiency in reduced prices, we shall have continued technological improvements and a rising scale of living.*

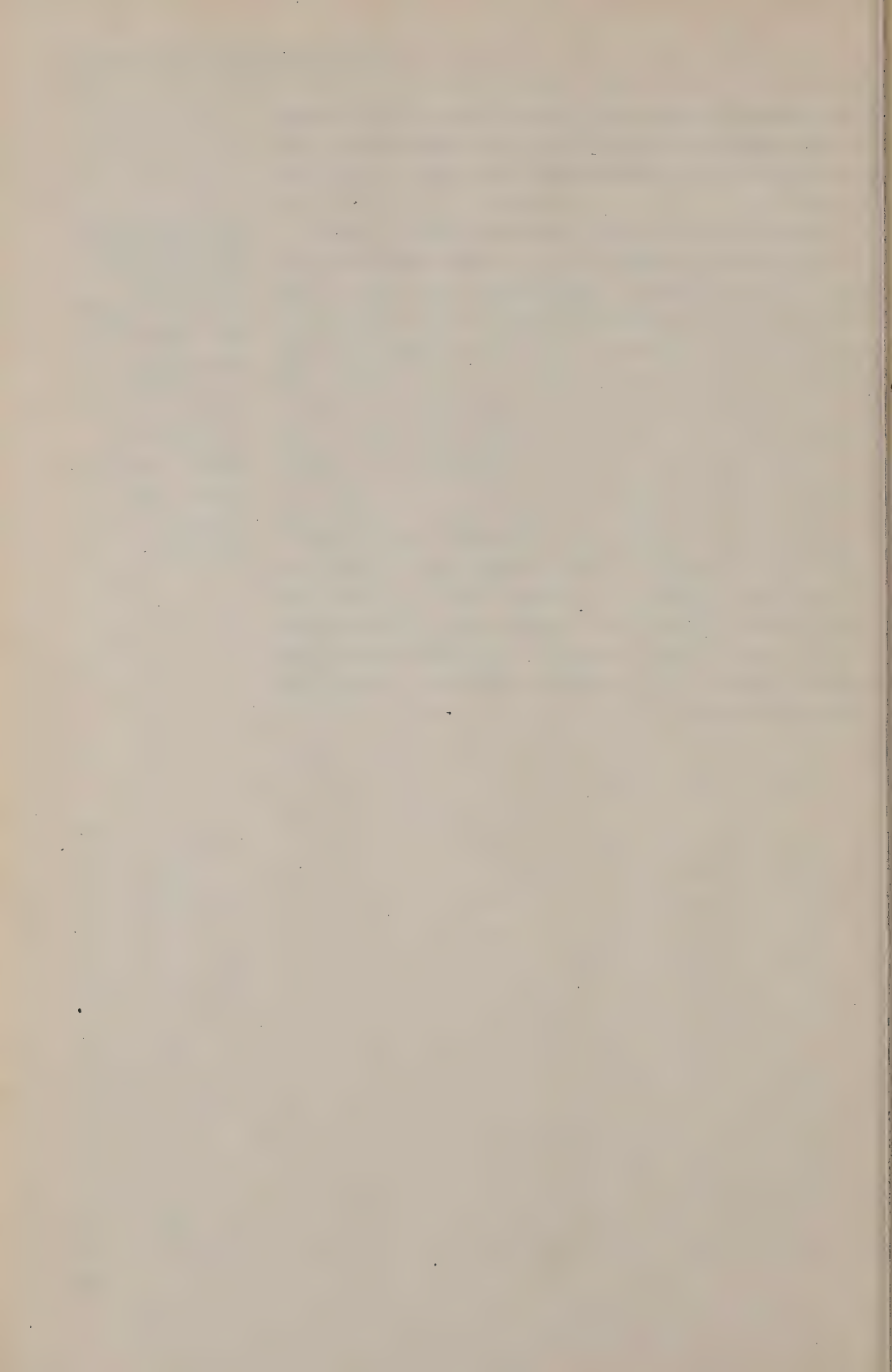
Taking the span of our history as a whole, it is clear beyond any question that as a result of technological progress we have had both greater and more efficient production. In consequence, the volume of employment has increased in proportion to adult population, and the real wages of our workers have been higher than those found in any other country. Whether this trend continues in the future will depend primarily upon whether we have adequate capital accumulation, whether individual investors have sufficient confidence in the future to use their initiative and their funds for the development of new processes and whether it is possible for them to pass along to the public as a whole, through reduced prices, the benefits of their accomplishments. If these conditions are not met, it must be obvious that the upward sweep in the living scale

of the American public will come to a halt. Only through technological improvements can we produce more and more goods at prices which more and more people can afford to buy.

In other words, if our economic system is "frozen," if new investment is made difficult or unattractive by governmental regulation, by hostility on the part of the Administration, by unbearable labor demands, or if unsurmountable difficulties are put in the way of developing new processes so that private investors are unwilling to risk their funds, then we must look forward to a period when we shall have few, if any, technological improvements, and those we have will tend to result in increased unemployment rather than in new opportunities for labor. Only by permitting the individual enterprise system to function properly, by encouraging initiative, thrift, and the formation of capital, by maintaining competition, and by perpetuating the possibility of reward for those who can produce better goods at lower prices—only if these things are done can we look forward to the continued progress which will provide jobs for further millions of our workers in the years to come.

*Maximum employment requires free functioning of the individual enterprise system, with encouragement of initiative, thrift, competition, and reward for efficiency.*





### III

## FUNDAMENTAL ELEMENTS OF THE INDIVIDUAL ENTERPRISE SYSTEM

IF one visits the great industrial centers of this country today and watches them turn out a flood of goods which will flow to markets throughout the world, it is difficult to realize that only two generations ago there still were sections of the nation in which the people were almost completely self-sufficient. They not only grew all their own food, but they raised the sheep from which they got the wool to weave the cloth out of which they made their clothes. They tanned the hides out of which they made their own shoes. They cut the timber out of which they built their houses, their furniture, and even their crude musical instruments. In short, they and they alone produced with their own hands practically everything, with the exception of spices, which made up their scale of living.

It is a far cry from these primitive conditions to the kind of living that we have in this nation today. It is a greater change than took place during all the Middle Ages of history. Yet it is accounted for by only a few basic developments—the developments which are the foundation of our present economic organization.

*A few basic developments in our economic system have worked a revolution in our way of life within less than 100 years.*

### DIVISION OF LABOR

Primary among these developments is the division of labor. Everyone knows that if a person does the same thing over and over he not only can do it better, but he also gets so he can do it faster. And everyone also knows that each of us can do some things better than he can do other things. Division of labor is the process by which these elementary truths come into play.

Division of labor is of two kinds. First is the concentration of a group of persons upon the production of one

*Division of labor both between groups or companies and within groups or companies has multiplied productive efficiency and achieved standardization of products.*

particular type of good or service. Thus, we have companies which produce nothing but radios, or nothing but shoes, or but one of the other thousands of articles which we use as consumers. Second is the specialization within the company itself, whereby one person or one group of persons does only a small part of the total job. Thus, one person in a clothing shop merely makes buttonholes, another sews on buttons, another cuts out the cloth, and so forth, with the result that in some of our large industrial factories there may be hundreds or even thousands of different jobs, each of which contributes its small part to the complete product.

Such division of labor is essential if a people is to reach the maximum of its productive efficiency. Without it there could be no "mass production," no assembly lines which pour millions of articles into the market at prices which are a mere fraction of what their cost would be if each one had to be completed by a single individual.

Through such division of labor we also get a standardization of products that is quite impossible under handicraft work. This means that the automobile we drive, or the washing machine in our kitchen, can be repaired with the minimum of expense if something goes wrong with it. In other words, through division of labor and its concomitant standardization of product, we enjoy, on the one hand, the protection of knowing that each unit of a company's product will be the same as every other unit, with the result that we can buy with confidence; on the other hand, the benefit of having "interchangeable parts" without which it would be impossible for millions of American homes to have the numerous mechanical gadgets which have done so much to reduce the daily toil and improve our scale of living.

## ORGANIZATION FOR PRODUCTION

*New types of organization have been developed to expedite*

Before division of labor can go far in an economic organization, it is necessary to develop means by which individuals can join together for purposes of production. Over the years many types of such organization have been developed, each having special advantages. These types c



organization are discussed at some length in the following chapter; so the major types need be only briefly sketched here.

The simplest type of such organization, and by all odds the most numerous, is the *individual proprietorship*. In this type of organization a single individual is the sole owner and bears the entire responsibility for the direction and control of the business. He may do all the work himself, or he may have hundreds or thousands of employees. But in all cases it is the individual proprietor who is responsible for any debts incurred by the organization and who gets whatever profits may be made or has to suffer any losses which are incurred.

To meet needs for more capital or for diversity of skills in owner-management, a *partnership* may be formed. In this case two or more individuals associate themselves together by means of a contract, which may be either written or oral. Actually there are many kinds of partnerships in the business world. In some—the general partnership, which is the most important—each partner is on a par insofar as responsibility and liability are concerned. The other types of partnerships are all designed to limit in one way or another this general liability on the part of some of the partners.

In our economic organization there are some partnerships which have assets running to many millions of dollars. In general, however, partnerships do not offer adequate scope for raising capital to take care of large undertakings, especially in the manufacturing field. As a result, more and more use has come to be made of *corporations*, and beyond doubt if this type of business organization had not been developed it would be impossible for us to get the full benefits of large-scale mass production.

In general, the corporation differs in three major particulars from the individual proprietorship and the partnership: (1) It is a creature of the state, organized under the provisions of a statute, and is recognized as a legal entity which can sue and be sued only in the corporate name. (2) Ownership is represented by stock, which may be of various kinds and which may be transferred without the approval of the other owners. In an individual proprie-

*division of labor, to permit pooling of resources and efforts, and to make large undertakings possible.*

*The partnership was a stage in the development of corporate organization and still has advantages in certain fields.*

*The corporation has a legal entity apart from that of the persons owning it; the interests of the owners are*

*readily transferable; and the owners have limited liability.*

torship the owner may sell his business, but then the proprietorship automatically ceases to exist and a new proprietorship comes into existence. In a partnership it is not possible for one partner to sell his interest without the approval of the other members of the firm, and even then technically, a new partnership comes into being. In a corporation, in contrast, there is no limitation to the right of a stockholder to sell his holdings at any time and under any conditions that he may desire. (3) The owners, or stockholders of a corporation, except in a few special cases have no primary liability for the debts of the corporation and cannot be called upon to use their own assets in case those of the corporation prove inadequate to cover its obligations. In other words, there is limited liability in a corporation, whereas in the individual proprietorship and the partnership there is unlimited liability.

#### SAVINGS AND CAPITAL FORMATION

*We have accumulated savings at a rate that has permitted the development of a vast amount of productive capital—in plant, machines, power equipment, etc.—in technological improvements whereby output of goods has been greatly increased.*

Obviously, the division of labor cannot go far, and the organization of companies will serve no purpose, unless there are the tools with which to work. These tools, and all that goes with them—the factory, the machines, the power equipment, etc.—compose what economists call “capital.” To be somewhat more precise, capital includes all goods which are used for the production of goods and services for sale. Only by the development of such capital is it possible for a people to progress beyond mere manual labor, and, by and large, it is true also that the greater the supply of capital, the greater will be the output of goods from a given supply of labor. One may find exceptions in individual concerns, but for nations as a whole there is a close relation between their general well-being and the amount of capital invested in their productive organizations.

But such capital, of course, does not just come out of thin air, and a nation cannot increase its capital merely by wishing. Capital comes from saving. To have capital someone must decide not to consume all that is produced. Perhaps the simplest example of such saving and formation of capital in our country today is the farmer who puts aside

part of his year's crop to use as seed for the following year. When he sets aside the seed, it is "saving"; when he uses the seed for further production, it is "capital."

For most of us, however, the process of saving and capital formation is much more roundabout. We save, not actual goods such as corn or wheat or potatoes, but a part of our wages or earnings, and then either we or someone else uses this money savings for the purchase of a machine, or new tools. Or we may use our savings to buy the stocks or bonds of some company already in existence. In this instance, we, in effect, are buying machines and tools and equipment which are already in use. That is, we are replacing the saving of someone else which was used, perhaps several times removed, for the actual purchase of the capital goods used by the corporation.

Regardless of the directness or indirectness of the conversion of our savings into actual capital, however, the end result is the same. In every case, what happens is that by setting aside a part of our current production we get the means by which we hope to produce more in the future. It is the same process, no matter how complicated it may become in present-day life, as when the fisherman takes off a day from actual fishing in order to make a net with which he believes he can catch more fish in the days ahead.

By following this process over the years, we in this country have accumulated a larger volume of capital per worker than the people of any other nation in the world. Specifically, although it varies widely from industry to industry, in manufacturing as a whole it now amounts to about \$6,000 per worker. This means in practice that each worker, in addition to his own skill, has the use of some \$6,000 worth of tools and equipment, all of which has been designed to enable him to be more efficient—to enable him to turn out a larger volume of goods with the expenditure of a given amount of his own energy.

## THE EXCHANGE OF GOODS

The final factor which must be mentioned, in order to complete the picture that is necessitated by division of labor, is the development of some means to exchange goods.

*This capital may represent individual savings or earnings "plowed back" into a business.*

*The accumulation here of a larger volume of capital per worker than in any other nation has given us the highest standard of living.*

*Our exchange system has removed the*



*difficulties of barter. Without it, in a highly developed society, workers could not claim their own in a joint product, products could not be traded effectively, and every community would have to be self-sufficient.*

In primitive economic societies one person trades what he produces directly for what he needs that is produced by others, and some such direct barter is still found in agricultural areas of this country. But such direct barter is not possible in a highly developed society.

1. When a large number of people are associated in a productive organization and each one contributes only his bit toward the article which is turned out, there is nothing which the individual workman can claim as his "own" in the way of product. In other words, there is nothing which he could gather up and take into the market as reflecting his work for the day with a view of trading it for the thing he needs.

2. Many, perhaps most, of the goods which are produced today do not lend themselves to being directly traded for the other goods which we as individuals need. They are not of the right unit of value and cannot be divided into the correct units, and those who have the things we want may not want what we produce. For example, imagine a worker in an automobile factory, even if he had the right to take a car in payment for his wages, trying to trade the automobile directly for his rent, the food he needs, his clothing, a movie, and so forth.

3. Such a system of direct swapping necessarily limits production to what can be traded to those to whom you can deliver your own product. In other words, every community more or less would have to be self-sufficient. Instead of having factories which can produce goods for market all over the world, with perhaps most of the workers of the community devoting themselves to turning out just this one product, it would require sufficient diversity of production to meet all the needs of its people. This means small factories, limited use of capital, limited use of specialization, and lower net results for the labor expended.

All these difficulties, however, are overcome by the use of money—and the overcoming of these difficulties, it may be emphasized, is the basic function of money. With a system of money it is no longer necessary to have direct barter. Then it becomes possible for a worker to produce a given product, sell the product for money to anyone who wants it, then take this money and buy what he wants from

*The development of our economic system, with its achievements, has been dependent on*

anyone else. Such a process, it should be noted, does not eliminate the necessity of producing something to sell in the first instance, nor does it eliminate the fundamental fact that one producer merely swaps what he produces for those things which someone else has produced. All that the existence of money does is to make such swapping indirect, rather than direct—to provide the automobile worker the means whereby he can trade the value he creates for a place to live, the clothes he wears, the food he eats, and the movies he goes to see. But by the introduction of this process it is possible for each of us to work exclusively at those things at which we are best, and to join with others in a team which can produce, not only for our immediate neighbors, but for world-wide markets.

*our money system.*

### THE SYSTEM AS A WHOLE

With division of labor, proper types of business organization, adequate provision for getting and using capital, and a money-pricing system, we have the basic foundation for the development of an industrial system. Of course, there must be also a legal system, the ability to make and enforce contracts, adequate police protection, etc., if the system is to be able to function. But, for the present, we are concerned only with the strictly economic aspects. Let us next, therefore, assume that we have these four essentials, and on the basis of this try to get a picture of the economic system as a whole.

Approaching from this viewpoint we find that all our economic activities fall into four rather broad divisions.

First are those activities which have to do with getting raw materials from mother nature. Here we find the fishing industry, the mining industry, the oil industry, forestry, and, most important of all, agriculture. Almost a fifth of all our "gainfully employed" workers are engaged in agriculture, and when there are added the workers in the other extractive activities, we find that roughly one fourth of us are engaged in providing the raw materials which on the one hand provide us our sustenance and on the other hand are the ingredients out of which we fashion the goods which enter into our scale of living.

*Our economic activities have four main divisions.*

*About 25 per cent of our workers are engaged in extractive industries, providing raw materials.*

*Another 25 per cent are engaged in processing raw materials or partly processed materials into finished products.*

*A third 25 per cent are engaged in distributive activities, including wholesalers, retailers, other "middlemen," and transportation.*

*About 25 per cent are engaged in other service activities (banking, insurance,*

The second broad division includes all those activities which are concerned with "working up" these raw materials into finished products. Approximately another quarter of us are engaged in this type of work. Almost every conceivable kind of company is found in this division, ranging all the way from the little handicraft shop in which the owner does all the work to the great industrial organizations employing scores of thousands of persons. It is important to note, too, that in most instances there is not just one organization which carries the whole process from raw materials to finished products. Rather, we find that there is most often a whole series of companies involved, each one performing its particular job and then passing its output along to another company which makes its contribution, and so on until the finished product appears. Thus one company may take cotton and convert it into yarn; then another company weaves the yarn into cloth; then another company dyes the cloth; then another company makes the cloth into towels, or clothes, or any of a thousand other things. Of course, this is not always true. One company may perform the whole operation. But, taking our system as a whole, it is more common for the goods to be passed along from one "processor" to another.

The third division includes those activities which are concerned with getting the goods from producers to consumers; that is, with "distribution." In this group we find our wholesalers, retailers, and middlemen of all kinds, as well as our enormous transportation system. Another quarter of our working population are engaged in these activities, some two out of three of whom are in wholesale and retail trade.

The final division covers a wide range of other services. It includes what may best be called "facilitating activities," such as banking, insurance, some professional services, and many of the services of government. It includes also activities in various other "gainful," both commercial and noncommercial, service occupations. About 25 per cent of our "gainfully employed" population are normally engaged in activities within this range.

To summarize, then, looking at our economic system as a whole, we find that roughly 25 per cent of the gainfully



employed are engaged in producing raw materials, 25 per cent in fabricating these materials, 25 per cent in distributing them to consumers, and 25 per cent in a variety of other services.

*professions, public service, etc.).*

### OPERATION OF THE ECONOMIC SYSTEM

In the development of the economic system through the division of labor, accumulation of capital, formation of organizations for production, and use of a money-price system, certain problems of relationship necessarily arise. Specifically, there are always the questions: (1) what price should be placed upon an article and (2) how the proceeds of a sale at such a price should be distributed among those who have contributed to its production.

*The operation of the economic system always presents two problems: price of product and distribution of proceeds of sale.*

Conceivably it would be possible to eliminate all these problems, insofar as the individual is concerned, by setting up an economic system in which every phase of our economic life is controlled and directed by a central authority—an authority which specifies what we shall produce, what is to be paid to each of the factors contributing to the production, how much is to be charged for the article, how much each of us must buy, and when we must buy it. And in some countries we find government-dictated economies that approximate this condition. But in this country, at least in time of peace, we work along an entirely different line. We believe that all such decisions should be made by individuals working through free markets. We believe that there should be a continuous exercise of choice by the buyer and the seller—a choice whether to buy or sell at all, whether to do it now or later, and whether either as buyer or seller to accept the proposed price. The shopping district of any American city in peacetime presents each day thousands of instances of this exercise of free choice. It is these free choices made day by day by millions of our citizens which control the direction of our economy—control what shall be produced, how much, and what can be charged for it.

*Rather than leave the solutions to a central authority, we choose in our economy to refer the decisions to voluntary adjustments in free markets.*

### *The Price System*

Through this control comes the ultimate determination of how our natural resources, our capital, and our

*Prices in a free market are*

*constantly  
adjusted  
between  
producers and  
consumers.*

*The price  
structure is  
thus kept  
sensitive to  
changing con-  
ditions in a  
progressive  
economy,  
especially the  
relation of  
supply and  
demand.*

*In this way  
people's  
diverse wants  
are most  
nearly met,  
progress is  
encouraged by  
competition*

labor shall be employed. In other words, every member of the community is continually casting votes in favor of one commodity as against another, or in favor of one manufacturer as against another, or in favor of one price today and perhaps against that same price in changed circumstances tomorrow. On the other side, producers constantly are voting for or against continuing production at the price level the public is willing to pay, and in consequence arrive at a decision to increase or decrease production, to expand or contract the amount of capital and labor in production, or to increase or decrease prices as the situation appears to warrant.

The price structure, thus, is characterized by continual change and readjustment. Even though a price yesterday correctly reflected all supply-and-demand conditions affecting a given commodity, the same price may not be the right price today because of changed conditions. There may have been introduced new competitive products, new sources of supply, new methods of production and distribution, new uses or expansion of old uses, and often more important than actual physical developments, there may have been a change in the attitude of possible users of the product so that its relative desirability as compared with other goods is greater or less than it was. However, in general it may be said that a growing demand for a particular product tends at first to raise its price, if there is no increase in the supply, and to maintain its price in the face of an increasing supply, with the result that greater resources are devoted to the production of the product. On the other hand, a decreasing demand for a particular product tends to lower its price and, if prolonged, forces some producers to consider shifting their efforts to other products.

The advantages of having our economy thus controlled through the free market place are beyond measurement. If permitted to function, it provides the people of a nation with each commodity that they want most, where they want it, and in the desired amounts. It encourages progress through the creation of new products and the selection for continuance of those which are voted most desirable by the free choices of consumers. I

brief, it gives us the foundation for true economic democracy, and affords the individual greater opportunity than any other system to develop along the lines he selects for himself.

*for the people's choices, and economic democracy is fostered.*

### *Wages and Profits*

The total receipts from the sale of products are divided into payments for materials, wages, interest on the capital investment (including rent), and profits. The amount which has to be paid for materials is determined by prices and is affected by such factors as discussed in the preceding section. The problem of the distribution of proceeds, therefore, is concerned primarily with the division between those who contribute labor and those who contribute capital in one form or another. In other words, if we overlook some of the refinements of classification, it is a problem of wages and profits.

*The problem of distribution of proceeds concerns mainly wages and profits.*

Frequently, it is assumed and argued that between wages and profits there is a basic conflict—the higher the profits, the lower the wages, and vice versa. And in the case of an individual company under certain conditions this is true. It is true also that there is a conflict between the two groups in that each is constantly trying to increase the amount that it gets.

If we consider the economic system as a whole, however, we find that there is no such conflict of interest. Wages are not paid out of profits. They are paid out of production. And profits do not come from wages. They come from production. Fundamentally, therefore, the interests of the two groups are identical—to carry on and increase production in the most efficient manner possible. And, in general, it is found that those companies which make good profits are also those companies which pay good wages.

*Since both wages and profits come from production, efficient and expanding production is a common interest of labor and capital.*

This is as should be expected. The productive process in the case of an individual company consists of taking certain materials and adding a further value to them through a change of their form or place or composition or combination. Now the greater the value thus added, the more there is to distribute between the labor and the



*There is no definite formula for measuring relative contributions of labor and capital to production.*

*In a free market the distribution of value produced tends to be adjusted fairly, toward optimum use of capital and labor.*

*It is a function of management to take care that this adjustment does fit the requirements of the market, and to satisfy customers, workers, and investors at the same time.*

*Management under our system has performed this task with increasing efficiency.*

capital used in the productive process. If only a little value is added, then there must be little per unit which is available for wages, interest, and profits. But if through productive efficiency a given amount of labor and capital can create a large additional value, then wages and profits both benefit.

The principal basis for a difference of opinion between those who receive wages and those who receive profits is the contribution which each group makes to the additional value created. It is never possible to resolve this issue with absolute finality. This is because the additional value is a joint product, and to carry on a given process both labor and capital are essential. This much, however, may be said: Under competition the total additional value is determined, and the distribution of such value as between wages and profits will depend upon the relative cost of labor and capital in the market place. That is, if wages get too high in relation to the cost of capital—the cost of a new machine—then more capital and less labor will be used. Conversely, if the cost of capital is too high, more labor will be used.

Making decisions as to how much labor and how much capital shall be used is one of the functions of management—one of its most important functions. Viewed in still more general terms, it is the duty of management to see to it that a company has a product which can be sold at a price that the public is willing to pay and that this price yields enough income to enable the company to pay adequate compensation for the labor and capital employed in its production. Since the public always wants lower prices and both workers and investors always want higher payment, it is not an easy assignment to keep all three groups constantly satisfied; but through our history as a whole a remarkably good job has been done by those in the managerial group. Thanks to ever-increasing productive efficiency, it has been possible for manufacturing industry as a group constantly to reduce prices, at the same time gradually increasing wages and shortening hours and to do all this without seriously undermining the rate of profits. And this process will continue just as long as productive efficiency continues to increase. But once tha

increase stops, this process also, which has given us a constantly rising scale of living, will come to a halt.

## REGULATION OF THE ECONOMIC SYSTEM

In the analysis up to this point we have discussed the organization and operation of the economic system as though by some means everything in the long run always worked out to the best advantage of society—as though all of us in our economic lives were imbued with a strong social conscience. Unfortunately, that is not true. Economic activities for the most part are undertaken for selfish gain. By and large, therefore, each person, at least within limits, is motivated not by what is best for society as a whole but by what will yield the greatest benefits to himself. Actually, it is well that this is so. Without the possibility of individual gain, most of us would make much less effort than we do. The problem, therefore, is how we can protect this incentive which leads each of us constantly to strive to improve his position, while we also make sure that society gains the greatest possible benefits. This is the problem of the regulation of our economic system. Such regulation takes two forms: by government and by competition.

Of these two types of regulation *competition* is by all odds the more important. In fact, it is safe to say that competition is the real “regulator” of our economy, and so-called “government regulation” is, or at least should be, nothing more than an effort to strengthen and make more effective the regulation by competition. In other words, freedom of competition truly is one of the basic principles of the individual enterprise system. Without competition it is inconceivable that the enterprise system could long exist and, to the extent it is curtailed, either through government action or by conspiracies in restraint of trade, the public loses the greatest assurance it has, or can have, that its interest will be protected.

Now competition is not just the effort of two manufacturers to undersell each other in the open market. There is competition whenever more than one person is offering a good or service for sale and the terms, price, and condi-

*Regulation of individual enterprise from outside is necessary to assure the greatest benefits to society —while protecting individual incentive.*

*Freedom of competition is the most effective regulator for this purpose, and the main purpose of government regulation should be to maintain that freedom.*

*Competition may be in prices, in quality, in*

*salesmanship, in service, in credit, in courtesy, in packaging, or in any other way influencing choice of products.*

*In such competition the buyer is continuously self-protected by freedom to choose, and the seller is required to maintain or increase his satisfaction of public wants.*

*In general, freedom of competition tends to assure minimum prices and profits, maximum satisfaction of public wants, fair compensation for each factor in production, a widening range of goods*

tions at which such good or service is offered are determined and controlled solely by the seller acting independently of all other sellers. More briefly stated, there is competition whenever there is more than one seller and each is free to determine the price and conditions at which he will offer his goods or services. We may have competition, therefore, in prices, in quality, in salesmanship, in service, in credit, in courtesy, in packaging—in short, in any phase which may possibly influence a potential buyer in making his selection of what and where to buy.

As long as there is such competition, it is impossible for a seller, at least more than temporarily, to take advantage of a buyer. If a particular seller's prices are higher than those of someone else offering merchandise of the same quality, the buyer simply transfers his trade to the seller who offers better bargains or gives better service. Furthermore, and equally important, when there is competition, the market is never safe for a seller. A dealer or manufacturer, through sound policies, may build a substantial clientele, but if there is freedom of competition, another dealer or manufacturer may come along and through still more efficient operations take the entire clientele away. Or an organization may work for years developing a process for making a given article, only to have everything it has done become obsolete overnight by someone else's discovery of a still more efficient method of producing the same article.

And so it goes, year after year, as long as we have freedom of competition. In summary form, it may be said that competition

- (1) tends to assure that goods and services will be produced and distributed at the lowest possible cost;
- (2) tends to assure that profits will be held to the minimum, because prices have to be kept down;
- (3) tends to assure that the energy and raw materials and productive capacity of the nation will be used for providing those goods and services which the public wants and in proportion to the relative demands of the public as reflected in the market place;



- (4) tends to assure that each factor in production will be paid, through wages, rent, interest, or profits, in harmony with the public's estimate of the contribution it makes;
- (5) assures that a constant effort will be made to widen the choice of goods and services offered the public;
- (6) assures that a constant effort will be made to improve the attractiveness of goods offered for sale;
- (7) assures freedom of opportunity, by making it possible for anyone at any time to enter any line of business he desires for which he has the necessary capital; and
- (8) assures free and continuous progress and a gradually improving scale of living, through the production of more and more kinds of goods, of better and better quality, at prices which a large and larger proportion of the public can afford to pay.

*and services available, increasing attractiveness of products, freedom of opportunity for enterprise, and a rising scale of living.*

*In a word, from the point of view of the public welfare, competition serves as a regulator and reducer of prices, as an incentive to improved production efficiency, as a guarantor that we shall get what we want, and as a protector of the freedom of opportunity.*

Because of the effectiveness of competition in the performance of this regulatory function, we have not felt it necessary through most of our history to rely heavily upon *government regulation*. Rather, as noted in our first chapter, our general policy has been to leave the individual the maximum of freedom. In other words, the public has not regarded regulation as an authorization for the government to play the game itself, but simply as a means of protecting and enhancing the public welfare without at the same time impairing our system of individual enterprise.

*The effectiveness of competition has reduced the need of government regulation, and limited it, through most of our history, to certain lines of activity.*

## A SYSTEM THAT WORKS

We have a system, thus, which applies to each individual of the community two great incentives: hope of reward and fear of loss. Under the working of these incentives we have been able to produce more, earn more,

*Offering every individual the two incentives of hope of*

*reward and  
fear of loss,  
our system has  
its short-  
comings but  
has worked  
better than  
any other for  
the general  
welfare and  
progress of  
the people.*

and have more, than the citizens of any other nation in the world. And we have done it all with freedom. Such is the individual enterprise system. That it has involved injustices and that it has suffered from imperfections, no one would think of denying. But even when full weight is given to these shortcomings, the basic fact remains that no other economic system in history has measured up so well, not only in the provision of the material things of life, but also in the creation of that free environment and that general social well-being which are essential to progress in the cultural and spiritual phases of the life of the individual.

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## IV

### TYPES OF BUSINESS ORGANIZATION

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**A**LL business organization takes the form of either individual proprietorship or some form of group ownership. When an individual goes into business he puts behind his undertaking his entire financial responsibility except to the extent to which the law allows him certain exemptions for the purpose of preventing his creditors from making him a public charge. If two or more individuals jointly enter a business, they likewise put behind their undertaking their joint and several resources except to the extent that the law permits them to allocate certain assets to a particular enterprise and restricts creditors of that enterprise to recourse against these assets. The individual and the informal group have no obligation to designate any particular property as a backing for their undertakings except as specific security is demanded and obtained by particular creditors.

As industrial life becomes more complex and extensive, it is appropriate and essential for greater numbers to join in a single enterprise. Likewise, it is desirable for individuals who have only a fractional stake in the total enterprise to determine at the outset the extent of assets they will assign to this part of their total interest. Since there are distinct public advantages in obtaining large-scale cooperation, it is only natural for individuals to seek and obtain permission to establish business organizations in which they can limit their liability to an agreed investment. It is necessary also to provide some continuity of existence for such organizations so that they need not be dissolved and perhaps reorganized upon the death or withdrawal of any of the associates. Procedure for conveying property and receiving conveyance and for suing and being sued must be simplified. Finally, some rules must be established for the relations of the associates among themselves.

*Business is carried on by individuals or groups.*

*In group enterprises provision is desirable for limiting individual liability, assuring continuity, expediting joint action, and defining relations of associates.*



*Whatever the form of a group organization, it is made up of human beings.*

*The several forms of business organization have developed out of individual freedom, with results beneficial to society.*

From these needs of the business community has been derived the law of business organization. Variations of the simpler business institutions have been developed to meet particular situations, to avoid certain handicaps to enterprises, or to express the ingenuity of enterprisers. Whatever the form of organization, it is in the last analysis composed of human beings, whether the business is a crossroads store in Vermont with a single Yankee owner whose family constitute his sole helpers, or the American Telephone and Telegraph Company with its close to 700,000 shareholder proprietors and its 400,000 executive managers, experts, and other employees. When government taxes corporations, it is taxing people. Taxes represent money that would otherwise be paid to the owners of the corporations and to their employees, reflected in lower prices to consumers, or retained in the business for future growth. When government regulates corporations, it is restricting the activities of men and women. When government enters into business competition with corporations, it is competing with some of the people for whose welfare the government exists.

The principal forms of business organization in the United States are the individual proprietorship, the partnership, the limited partnership, the joint-stock association, the business trust (often called the "Massachusetts trust"), and the corporation. Several of these types exist in many varieties, and in some there are important subdivisions. Some of them, such as the limited partnership and the corporation, cannot exist except under statute. Large-scale business organizations, such as joint-stock associations and business trusts, are for some purposes, notably income taxation and bankruptcy, subject to the same general laws as corporations.

The American system of individual enterprise has developed around the concept that each individual has the privilege to make contracts, to own property, and to enjoy the fruits of his labor, subject to the general restriction of refraining from doing harm to others. In practice this means that individual inclination and the spirit of competition have full opportunity to produce and sell goods and services. The historical result has been the steadily

increasing production of more and more goods of better and better quality, more and more widely available to the whole population.

In the following pages will be found a brief description of the chief forms of business organization. Subsequent to this, a final section discusses some current problems of the corporation as a factor in contemporary American economy.

## THE INDIVIDUAL PROPRIETORSHIP

The individual proprietorship is the simplest of all types of business organization. In it a single individual is the sole owner and bears the entire responsibility for the direction of the business. He alone is held accountable for debts of the organization and is entitled to any profits it may make. In point of numbers there are more of these organizations than of any other types. A majority of farms are operated as individual proprietorships, as well as most of our small stores and shops. If we include professional services, we have a large additional number of business proprietorships.

Of all the types of business organization the proprietorship is of course the most easily formed. In general, any individual who is competent to enter into contracts may set himself up in business. There are, it is true, some types of business in which an individual is forbidden by law to engage, except with the approval of the state or upon the payment of a license fee; and occasionally businesses of certain types are limited as to location. Not only in respect to such professions as law, medicine, dentistry, and engineering does the state require a license after proof of competency before an individual can offer his services to the public, but similar requirements have been widely extended to many others, including certified public accountants, electricians, and plumbers. In addition, a license is frequently a condition of doing business as a warehouseman, a broker, an auctioneer, or a barber, and in numerous other activities. These requirements are designed primarily either to assure a minimum of financial responsibility or to protect the public from persons of bad

*Individual proprietorship is the simplest and still most prevalent form.*

*Only in some occupations does licensing limit freedom to start a business in this form.*

reputation. The license fees also create a fund which can be used for the inspection of these businesses in order to enforce a continuing compliance with the conditions under which the license is granted. By and large, however, there is still substantially complete freedom to engage in business, and such freedom is important, since in no other way may those who can render superior economic service be discovered.

***The proprietor has sole responsibility.***

Since the proprietor is his own master, action in the operation of his business may be taken with more promptness and vigor than in more complex organizations. In a word, he can conduct his business as he pleases so long as he does not infringe on legal rights of others. He can be efficient or inefficient, courteous or discourteous, hard-working or lazy. He pays the price if his judgment is poor or if his behavior repels prospective customers.

Ordinarily the capital of a proprietorship depends largely upon what the proprietor is able or willing to put into it. If his personal capital is small in amount, this will limit the size of the organization he can establish, unless money can be borrowed. Regardless of how much of his savings the owner of a proprietorship puts into the business, he risks his entire wealth in the venture. That is, should the business become insolvent, all of the proprietor's nonexempt property, whether devoted to the interests of the enterprise or not, is available to his creditors.

***Most proprietorships are small enterprises.***

In general there is less public control of individual proprietorships than of any other types of business organization. There are, of course, no limits placed upon the size to which a proprietorship may grow. It can continue to expand just as long as the proprietor can direct it efficiently and obtain the necessary capital. For the most part, however, proprietorships are small organizations, because as they prosper and grow it is ordinarily advantageous to convert them into partnerships or corporations.

***Continuance of a proprietorship is not assured.***

Unless terminated by insolvency, a proprietorship may continue during the lifetime of the proprietor if he so desires. On the other hand, the proprietor may discontinue the business at any time he wishes, if all creditors are given satisfaction. Likewise a proprietorship may be sold by the owner to someone else, but if sold to another individual



it would be not the same proprietorship, but a new one under the control of the purchaser.

Since the individual proprietorship is the property of one person, the business, as a legal unit, terminates when he dies. Unless the business is a professional service, the assets may be temporarily administered as a going concern by executor or administrator and thereafter, subject to the interests of creditors, may be liquidated, sold as a unit, or transferred to legatees or devisees, depending upon the circumstances and the testamentary directions of the decedent.

### THE PARTNERSHIP

A general partnership comes into being when two or more individuals associate themselves, by means of a contract, in the common ownership and management of a business for profit. More simple in structure than the corporation, it is less simple than the proprietorship, since two or more individuals are now acting in concert. In addition to the relations which must exist between an enterprise and those with whom it does business, we now have another set of relationships, those affecting the associated individuals themselves, and these are often productive of difficult legal problems.

*A partnership creates new relationships.*

It must be borne in mind constantly that the partnership arises out of a contract, which may be oral or written. An oral contract of partnership is valid, but the difficulties which may arise when a contract is not in written form are obvious. Whenever a partnership is formed, a carefully worded agreement should be drafted under expert guidance. This agreement is commonly called the "Articles of Partnership" or "Partnership Agreement." Even if no contract has been made, the courts may find that a partnership is to be inferred from the relations and actions of the parties, and hold them to the liabilities of partners.

The types of business in which partnerships engage are quite similar to those in which the proprietorship is found: retail trade, merchandising, brokerage, investment, small manufacturing establishments, and the professions.

*Articles of partnership usually contain names, purposes, place, duration, capital contributed, division of profits, powers of members, provision for dissolution.*

Farming is not usually a partnership enterprise. An arrangement for farming on shares does not generally create a partnership.

As already indicated, the partnership is comparatively easy to form. Like the proprietorship, it need not obtain the sanction of the state through a charter. The only formality necessary is the drafting of articles of partnership, which may be quite brief. Where the partners wish to provide for various contingencies, however, the agreement may be quite specific and extensive.

Usually partnership articles contain at least the following provisions:

- (1) The names of the partners
- (2) The purposes of the partnership, the kind of business in which it will engage, and the place of business
- (3) The name under which the partnership will operate (It is now usually necessary to make public registration of any partnership's name used other than the names of the partners.)
- (4) The length of time during which the partnership will continue
- (5) The amount and description of the capital contributed by each partner (Sometimes a partner contributes only his services.)
- (6) The time and the manner of dividing the profits among the partners, and the apportionment of losses
- (7) Description of the powers of the members
- (8) Provisions regarding dissolution

No attempt here is made to state the details of partnership law as developed either by common-law judicial decisions or by statutory enactments.

Following are some of the normal incidents of partnership:

1. Suits on behalf of the associates must be brought by joining as plaintiffs all the associates and not in the partnership name.

2. Suits against the associates must be brought against them all by name and not against the partnership as an entity.

3. Real property at common law cannot be acquired or conveyed in the partnership name. This rule has been changed by statute in some states.

4. Judgments against all the partners can be executed against either partnership assets or the separate property of individual partners. The responsibility of each general partner is unlimited. Judgments against individual partners, not involving the business, cannot be executed against the partnership property. By equitable or statutory proceedings, if a judgment against an individual partner is not paid, his interest in the partnership may be charged and, unless redeemed, the partnership may be dissolved and the partner's interest reduced to a money equivalent. In case of bankruptcy or other insolvency proceedings involving the partnership, partnership property is first distributed to partnership creditors, and the other property of the partners distributed first to their individual creditors. A partnership is not insolvent unless the individual general partners are also insolvent, since each has unlimited liability for partnership debts.

5. Each partner is an agent of the partnership in the management of the enterprise. As far as the partners themselves are concerned, this rule may be changed by agreement.

6. The interest of a partner is not transferable without the consent of the other partners. He may withdraw and effect a dissolution. If his interest is transferred with the consent of the other partners, technically a new partnership arises. Death or bankruptcy of a partner dissolves the partnership.

7. A partner may not sue either the partnership or one of his fellow partners for damages relating to the partnership business. However a partner by a suit in equity bringing in all the partners may compel an accounting so that he can obtain relief for any wrong done to him by any of the partners.

All states have some statutes dealing with partnerships, and more than half of them have adopted both the

*Partnership law clarifies and regulates relations within and outside.*



Uniform Partnership Act and the Uniform Limited Partnership Act. In some states mining partnerships are recognized as distinct forms of association. An important characteristic of this type of statutory partnership is that shares are transferable and the transfer does not effect a dissolution. Death or bankruptcy of a partner in a mining partnership of this sort also does not effect a dissolution.

### *Joint Adventure*

***A joint adventure differs somewhat from a partnership.***

A joint adventure is not generally regarded as technically a partnership, but a number of the principles of partnership law are applicable to it. A partnership generally continues for a definite or indefinite period, while a joint adventure is a single undertaking or series of undertakings not requiring the entire attention of the participants. For a joint adventure there must be coownership. Unlike a strict partnership, a joint adventure may not be adjudicated a bankrupt as an entity.

### *The Underwriting Syndicate*

***An underwriting syndicate is a special device used in investment banking for temporary purposes.***

A form of temporary business association, usually neither a partnership nor, strictly speaking, a joint adventure, though somewhat resembling the latter, is the underwriting syndicate for the distribution of investment securities. A large corporation, for example, desires to raise additional capital by floating an issue of stock or bonds. The officers of the corporation will get in touch with an investment banking firm which will examine the proposition. If the terms of the issue are found to be satisfactory, the investment house will agree to be responsible for the successful flotation of the securities. The investment banker will then organize a syndicate made up of a number of investment houses, which agree to underwrite the issue. The syndicate may agree to buy the entire issue outright from the corporation, expecting, of course, to sell the securities to the public at a higher price in order to make a profit. Or it may agree to market the securities for a commission, with the understanding that if the entire issue cannot be sold the syndicate will take the unsold

portion off the hands of the corporation and hold it until a favorable opportunity presents itself. Sometimes a corporation will sell securities directly to investors and the underwriting syndicate will stand by, agreeing, for a commission, to step in and finish the marketing of the securities if the corporation is not successful. The syndicate, in such a case, might have to buy the securities itself if it is impossible to sell them to investors. The investment house organizing the syndicate usually becomes the syndicate manager, with broad powers.

### *The Limited Partnership and the Partnership Association*

The limited partnership is generally called a partnership although the limited partner himself is not a true partner but an investor who receives a share of the profits instead of interest. Because of the necessity of statutory authority for the organization of a limited partnership and because of the limited liability of the limited partner, the limited partnership is in some respects more like a corporation than a partnership. By limited liability we mean that the limited partner need not answer for partnership debts beyond his investment and that he has nothing to do with the management of the partnership unless, as is possible but not common, he is also a general partner. Every limited partnership must have at least one general partner. The New York Stock Exchange generally requires more than one general partner in a firm which has a stock exchange membership. Incidentally, the New York Stock Exchange does not admit corporate members or members who represent corporations. Recordings of articles of partnership and publication of relevant facts are standard requirements if a partner is to enjoy limited liability. Limited partnerships exist generally throughout the United States.

A few states, notably Pennsylvania and Michigan, have statutes permitting limited partnership associations. These associations issue share certificates; the partners are limited as to liability to the amount of their investment; and the enterprise is conducted by managers elected by the shareholders. Such organizations are similar in many respects to corporations. Unlike the practice in regard to

*A limited partnership requires statutory authority and limits liability of certain partners.*

*Some states permit limited partnership associations which resemble corporations except*

*mainly as to transfer of shares.*

*The joint-stock company is a form intermediate between partnership and corporation, permitting wide participation, requiring no state charter, but with unlimited liability and no corporate entity.*

corporations, although frequently the same result can be accomplished by a corporation, the share certificates of partnership associations are not freely transferable. Purchasers of shares must be elected to membership by other partners. If the purchaser is rejected, the partner who wishes to sell may usually compel the other partners to buy his share, either at a price fixed by the articles or at a price determined by appraisers with or without court action.

## THE JOINT-STOCK ASSOCIATION

As a matter of legal theory a joint-stock association or company can exist as a common-law partnership whose variations from the ordinary partnership are determined by the contracts of the associates among themselves. Functionally, because of its size, management, and business methods, it is more like a corporation; in bankruptcy and generally in respect to income taxation, it is treated like one. At one time these associations were of considerable importance, particularly in the express business, in which the Adams Express Company, the American Express Company, and others were joint-stock associations. Unless there are statutory provisions for holding and transferring property, especially real estate, and for suing and being sued without the necessity of joining all the partners, it is usually too cumbersome to justify its use in preference to incorporation. Many states have statutes regarding joint-stock companies. Some of these statutes are designed to facilitate the activities of the companies, others to bring them under the regulatory and taxation requirements of corporations. Such associations can be organized without state permission. They have transferable shares, are not subject to dissolution by the partners, and are managed in general by directors elected by the shareholders, although the details of management are handled by officers chosen by directors, as in the case of corporations.

Some of the advantages over the individual proprietorship and the ordinary partnership are the following

1. It is possible to obtain large amounts of capital from a great number of individuals, each one of whom may contribute comparatively small sums.



2. The transferability of ownership in the business is accomplished with less difficulty. The shares, or certificates of proportional ownership, may pass freely from hand to hand. Those who desire to sell their interest can do so readily as soon as they find a purchaser. Therefore the investor is in a more favorable position.

3. It has a more permanent life, which gives greater stability and continuity in its affairs. The death, incapacity, or bankruptcy of an owner or director does not terminate its existence.

4. It makes possible the obtaining of capable and centralized management for enterprises of large size. Authority is delegated to directors and officers who are responsible for the success of the undertaking. The capacity to pay large salaries enables it to secure a high degree of managerial ability.

5. It makes possible the organization of business units of large size, which may lead to lower costs and selling prices through the economies of large-scale production.

On the other side are two important defects, the second but not the first of which is frequently remedied by statute:

1. Its shareholders have unlimited liability.

2. The association does not possess an existence in the eyes of the law separate and apart from the existence of the shareholders. It cannot own property, which must be held by trustees. All members must be joined in lawsuits.

### THE BUSINESS TRUST

The business trust is a form of business organization in which an attempt is made to obtain certain corporate advantages and to avoid corporate restrictions without incorporation. It is frequently called a "Massachusetts trust," not because it is found only in that state but because it had its earliest and most extensive development there. Starting in Massachusetts for managing and operating large real-estate ventures because of local statutes prohibiting corporations from dealing in real estate, it was rapidly adopted for other enterprises in that state and elsewhere, and for a time was an important factor in the exploitation of Texas oil lands.

*In business trusts the advantages of corporations have been sought without incorporation.*

*These are not trusts of the sort challenged by antitrust laws,*

*nor the same as voting trusts,*

*but are more like testamentary trusts, though created by the beneficiaries themselves.*

The business trust should not be confused with the so-called "trusts" which are the subject of laws prohibiting restraint of trade, monopoly, and interference with competition, nor with voting trusts for corporate shares. Although some of the early combinations challenged as restraint of trade, particularly the Standard Oil Company of New Jersey, used the trust device as a method of unified control, and laws regarding restraint of trade are popularly known as antitrust laws, the technical trust is now practically extinct as a method for effecting business combinations, and indeed had been almost everywhere abandoned even before the passage of the Sherman Antitrust Act of 1890. Antitrust laws have no particular application to business trusts, although it would be doubtless possible for such organizations to engage in practices forbidden by laws relating to restraint of trade.

The voting trust is an arrangement by which corporate shares having voting power are held by trustees for a stated period. The trustees are the technical shareholders, while the real owners of the corporation hold voting trust certificates. Voting trusts are frequently created following a corporate reorganization and are usually limited by statute to a duration of not more than 10 years.

The business trust has trustees who are legal owners, as in a trust created by will or by a declaration of trust for particular beneficiaries. In a business trust, however, those who create the trust are usually the beneficiaries themselves. The trustees hold and manage the capital investment for the benefit of the beneficiaries. The interest of the beneficiaries is represented by certificates of beneficial interest which are freely transferable. The interests, duties, and liabilities of the parties and the duration of the trust are prescribed in the declaration of trust by which the organization is created. The beneficiaries generally have some power in respect of the selection of trustees, but little or no other control over the management.

The rapid early growth of business trusts from 1910 to 1925, aside from fields prohibited to corporations, was due among other things to their immunity from law regulating corporations, their freedom from franchise and

other corporate taxes, and their ability to do business in various states without complying with conditions for doing business imposed upon foreign corporations. For reasons too technical to be discussed here, the Rule against Perpetuities and laws regarding restraints on alienation, both applicable to ordinary trusts created by will, were not generally held to apply to business trusts. In short, there was a widespread feeling that a device had been discovered by which corporate advantages could be obtained without incorporation.

The business trust, however, had a number of serious defects. One of the most important was that unless the beneficiaries surrendered practically complete control to the trustees for a definite or indefinite period, there was great danger that, in the event of the failure of the enterprise, the beneficiaries would be held liable as partners for the obligations of the trust. Decisions to that effect were embarrassingly common. Furthermore, by decision and statute, business trusts have become increasingly subject to the requirements of "blue-sky" laws, to the same taxation as corporations, and in general to regulations prescribed for corporations. The end result, in the opinion of many lawyers and businessmen, is that, instead of having corporate advantages without incorporation, these trusts have the corporate disadvantages without the corporate advantages. Although business trusts still do a considerable amount of business, it seems likely that their popularity has passed its peak and is permanently declining.

*Business trusts have become less prevalent in recent years, however, because beneficiaries shared liability if trustees were not given complete control and because such trusts have been brought under taxation and regulation.*

## THE BUSINESS CORPORATION

The corporation is the principal type of business organization which can be created only by public permission. Other forms of organization, such as the limited partnership, require statutory authorization to be recognized to a greater or less extent as legal entities, but the very existence of the corporation depends upon the state's action. Not all corporations are business units. The earliest English corporations were ecclesiastical, municipal, and educational. Some of these may have existed by prescription as a result of immemorial usage, without any formal

*The corporation, unlike other forms, cannot be created without public authorization.*



*The chartering of early trading corporations with governmental powers set precedents for modern corporations, also for restrictions on them.*

*The corporation is now organized under provisions of a statute, given a legal entity, and relieving associates of liability beyond corporate assets.*

*Business corporations may be classified as for profit and cooperative; as financial and nonfinancial; as closely and widely owned; as small and large.*

public grant. There were also early trading corporation which not only engaged in commerce but had governmental powers. In a history of corporations one must also note the merchant guilds, whose powers of management and control had many of the characteristics of the powers subsequently granted in England to the trading companies. Rules of law developed at an early time in respect of these predecessors of the modern corporation have often persisted and been applied as unfortunate restrictions upon the later business institutions without governmental power. Even if these early precedents had been absent corporations undoubtedly would have developed out of the need for bringing together the capital of many people in a single enterprise, especially after the invention of industrial machines made large-scale business activity essential.

The business corporation is an association organized under the provisions of a statute and recognized as a legal entity which can sue and be sued only in the corporate name, with no primary liability of the associates for the debts of the association, and with no unlimited secondary liabilities upon them after the assets of the associates have been exhausted. Liability for corporate debts in certain circumstances is still imposed in some states upon the members of a corporation. A former practice, now generally abandoned, required shareholders in banking corporations to contribute in the event of insolvency an amount up to par value of their shares.

Disregarding for purposes of this discussion the wide variety of nonbusiness corporations which still exist, business corporations may conveniently be divided into corporations which distribute earnings on the basis of investment and cooperative corporations which are often membership associations. Other classifications are of course possible, particularly from the functional viewpoint. For some purposes it would be desirable to distinguish between financial corporations, such as banks, and nonfinancial corporations, such as manufacturing companies. Another useful classification is between what is often in fact the "one-man," the "close," or family corporation, or other small company whose owners are also its sole managers

and the large corporation with many shareholders, few or none of whom may have active duties of management. For other purposes, the division between small and large may depend upon capitalization, volume of business, and number of employees. Public-utility companies represent a category which presents its own peculiar problems. The holding company is another special type of corporation of which brief mention will be made subsequently. Because of the extent of powers enjoyed by many corporations, once a classification is made it is often difficult to determine to what group a particular corporation will be assigned. One of the leading New York banks, for example, was originally a department of a water company.

*Public-utility companies and holding companies are special types.*

### THE CORPORATION FOR PROFIT

For a more detailed description of the corporation for profit, or for distributing earnings on the basis of investment, perhaps the most helpful summary is that proposed to the American Law Institute by its director, William Draper Lewis, and his advisers in 1928, in a tentative draft offered as an introduction to a proposed Restatement of the Law of Business Associations. The subsequent abandonment of this project does not affect the authoritative merits of the proposal. According to Mr. Lewis, the corporation for profit means that

*So-called "corporations" for profit have certain common characteristics readily defined.*

two or more persons are associated under a statute in a common business enterprise, and that with respect to this common business enterprise

- (a) they have adopted a common (corporate) name;
- (b) they can sue and be sued and hold and convey property only in this common name;
- (c) the individual primary responsibility of each for obligations arising from the common business enterprise is limited to his interest in the property of the association;
- (d) the individual secondary responsibility of each for obligations arising from the common business enterprise is generally limited to his unpaid subscription to the property of such enterprise, or to a fixed maximum amount in excess thereof;
- (e) the common business enterprise of the persons associated therein (usually called "shareholders") is managed by persons (usually called "directors") whom the "shareholders," or a class of

"shareholders," elect at intervals, although the "shareholders may have some control of the management;

- (f) their rights and obligations are divided into units called "shares, and such units are transferable; the transference of all the "shares" to one person does not terminate the foregoing legal incidents.

*The terms "shareholder" and "share" are more accurate than "stockholder" and "stock," but less used in America.*

Mr. Lewis used the terms "shareholder" and "share" to denote the member of the corporation and his interest rather than "stockholder" and "stock," because in his opinion the former terms denote more accurately what the member of the corporation is and has. As he pointed out apart from its use in connection with corporations, the business world used the term "stock" to indicate the property with which a partnership or other business unit carries on its business. He might have noted also the British use of the term "stock" in respect of the evidences of government obligations. Although the terms "stockholder" and "stock" are well established in American business usage, there is much to be said for Mr. Lewis's contention that the terms are confusing and that the use of the more accurate terms should be encouraged.

*The fixed capital of a corporation is represented by stocks and bonds.*

The fixed capital of a corporation is represented by bonds and shares. The former represent loans by creditors; the latter, investment by the enterprisers.

Bonds are of many kinds. Classification may be based upon term, which is usually of some length; upon whether registered or coupon; or upon provisions in respect of methods of repayment, security, callability, or convertibility.

The principal kinds of shares are preferred and common. The preferred shares may be cumulative as to dividends or noncumulative, may be preferred as to dividends or as to dividends and assets, may be participating or nonparticipating (that is, they may or may not share in profits after the payment of the regular dividend), callable or noncallable, and voting, nonvoting, or voting in special circumstances, such as the nonpayment of a certain number of dividends. Common shares may be voting or nonvoting. Many states now allow shares of most corporations to be issued either with or without a par value according to the provisions the incorporators wish to make.



part of the articles of incorporation. The present rules of the New York Stock Exchange do not permit admission to listing of shares which have neither a vote nor a preference.

Incorporation in the early days of the republic was by special act of Congress or of the legislatures. In England early corporations were created by royal charter or special act of Parliament. Since 1800 the American development has been toward incorporation under general laws. An important early act was the New York statute of 1811 providing for incorporation of manufacturing enterprises with a capital not exceeding \$100,000. A more modern type of general incorporation law was the Connecticut statute of 1837. At present all American states have general incorporation laws. In England also, by a series of acts beginning with the repeal of the Bubble Act in 1825 and culminating in the Companies Act of 1862, amended in important particulars in 1867, incorporation for most business purposes now is accomplished under a general act. In both the United States and England, however, incorporation by special act is still possible except as constitutionally prohibited in some American states. In addition to the general corporation statutes there are everywhere general acts applicable to particular types of business; for example, to banks and insurance companies.

American states permit most corporations organized under the laws of other states to do local business upon satisfying their requirements as to foreign corporations. Interstate trade can be carried on across state lines without qualifying as a foreign corporation, although by police regulations relating to quarantine, traffic control, and various sorts of inspection, as well as by taxation, the states frequently contrive to impose considerable burdens upon interstate commerce.

Incorporators have the practical choice of organizing in any state whose laws seem most favorable for their purposes, even though no actual business will be done in the technical domicile of the corporation. Some of the factors considered are ease of organization, ability to obtain broad powers for the corporation, discretion to incorporators as to paid-in capital, freedom in respect of

*Incorporation by special act has been replaced by incorporation under general laws.*

*Corporations organized in one state may operate in others.*

*They choose for incorporation states with liberal laws.*

the classification of shares, place of meeting of shareholders and directors, simplicity of amendment of articles of incorporation, and the amount of initial fees and annual taxes. Delaware is one of several states with liberal incorporation laws, and, because of the degree to which Delaware has modernized its corporation statutes and its situation with respect to the great industrial areas, it has been since 1915 the favorite American state of incorporation.

*A general federal incorporation law has been often advocated, but never enacted.*

Although Congress has never enacted a general federal incorporation law, it has passed special acts of incorporation and a special incorporation law for national banks. The desirability of a general federal incorporation law was debated by the Constitutional Convention and such a law has been advocated by Presidents Theodore Roosevelt, Taft, and Wilson. President Taft once wrote "No other method can be suggested which offers federal protection on the one hand, and close federal supervision on the other, of these great organizations that are in fact federal because they are as wide as the country and are entirely unlimited in their business by state lines." Many federal incorporation bills have been introduced in Congress, notably by Senators Borah and O'Mahoney, although perhaps it is more correct to refer to Senator O'Mahoney's bill as one for federal licensing for interstate commerce rather than for federal incorporation. The matter has again been brought to public attention by the distribution of copies of a proposed voluntary federal incorporation act recently drafted by a committee of the American Bar Association. From the standpoint of the corporation themselves, the chief advantages of a federal law might be relief from the burdensome and discriminatory legislation of some states against foreign corporations. It would be possible to simplify the tax problems of corporations if they were organized by the federal government. Some consolidation and even elimination of agencies now regulating corporations might be effected. Whether any of these ends would be attained is a matter of conjecture.

*Federal licensing has been advocated also as a*

Much of the advocacy of federal incorporation has come from those who think that there would result better protection of investors in respect of the issuance of securities, greater protection of minority corporate interests

prompt curbs on monopolistic tendencies, correction of abuses as to intercorporate holdings, and a general cover-every-corner federal supervision. In order to overcome opposition of states, which fear a loss of revenue if they had no power to charter corporations in interstate trade, there has been a tendency to support federal licensing rather than incorporation. The interest of those desiring either federal incorporation or licensing for the sake of greater control of corporations has been considerably diminished by the creation of the Securities and Exchange Commission with its multifarious functions relating to the issuance of and dealings in corporate securities.

No opinion about federal incorporation can fairly be expressed except in respect of the concrete proposals of a particular bill. If voluntary federal incorporation could be established to simplify the organization, workings, and supervision of interstate corporations, it would have much to commend it. On the other hand, if a federal incorporation or licensing act merely added new governmental agencies whose regulations were piled on those to which corporations are now subjected, the prospect is one which has little to commend it except to the confirmed bureaucrat.

The customary procedure for incorporation is to draft an instrument known as "articles of incorporation," "articles of association," "charter," or some similar designation, which after execution by a required number of incorporators, who in many states may be only the nominees of those actually interested, is filed and recorded with the Secretary of State (of the state) or other designated state officer. There is often the additional requirement of recording in the county where the corporation has its principal office. A fee is paid for the privilege of incorporation and usually a certificate is issued by the Secretary of State, or in a few states by the Governor. The articles include the name of the corporation; its principal place of business; the nature of the business; details as to capitalization and shares; the names and residences of the incorporators; the duration of the corporation, which generally may be perpetual; the extent, if any, to which shareholders are liable for corporate debts,

*protective measure, but the SEC has provided protection of investors.*

*Incorporation involves filing "articles" in state office, issue of certificate by state; it represents a contract with the state.*



subject to statute; and any desired provisions as to powers, management, preemptive rights, and amendment.

The charter is a contract with the state. To avoid the constitutional provisions prohibiting the impairment of contracts, modern corporation laws have provisions reserving to the legislature certain powers over all corporation charters.

*Statutes and court decisions in regard to corporations have reached enormous volume.*

Statutory provisions and rules of corporation law developed by judicial decision are of enormous volume. Problems of the corporation law include, among many others, those relating to defectively formed corporations; preincorporation transactions by promoters; distribution of corporate powers among shareholders, directors, and officers; scope of corporate activities, including effects of *ultra vires* conduct (that is, conduct beyond the corporation's granted powers); directors' duties to shareholders and creditors; creation, decrease, and increase of corporate capital; dividends; and dissolution. In addition there are the great and increasingly complex questions arising out of the relations of the corporation to the state and to labor. Discussion of these legal matters is beyond the scope of this chapter.

*The nature and authority of the corporation are continually debated, but most cases involving corporations may be fairly disposed of without exploring underlying theory.*

Brief reference should perhaps be made to what Max Radin calls the "endless problem of corporate personality." George Wharton Pepper has said that a state no more "creates" a corporation than it "creates" a marriage. At the other extreme is the view that incorporation is a direction to the courts of a sovereignty to regard a group of human beings as a legal entity and that this direction has no binding force outside that particular sovereignty. Speculative writings on the nature of the corporation and its authority to act are extensive both in the United States and abroad. These books debate such issues as whether the corporate person is real or fictitious, natural or artificial.

This broad question, which, as Prof. Radin remarks is deeply entangled in metaphysics, epistemology, and logic, has engaged the attention not only of theoretical writers but of many practical lawyers, and has often been discussed in judicial opinions. Judges are particularly apt to refer to the fiction theory of corporations when they wish to impose a liability on the members of the corpora

tion for a corporate act, or on one corporation for the act of another corporation which it controls. It is sometimes said that the courts thus "pierce the corporate veil," "disregard the corporate entity," or "ignore the corporate fiction." In few if any domestic cases is it necessary to find any such theoretical basis for reaching an equitable decision in the particular case. It is the opinion of many well-known authorities on corporation law, including Prof. E. Merrick Dodd of Harvard, that as a practical aid to the decision of cases theories as to the nature of a corporation have been of little value and have had little effect. In Prof. Dodd's words, "generalizations on the subject from the standpoint of general jurisprudence can probably not be made which will be helpful in the jurisprudence of a given country or system." It is possible, however, that in the settlement of corporate claims, especially for war damage, before international tribunals, theories on the nature of corporations may be of considerable importance in determining the question of the nativity of corporations.

### THE HOLDING COMPANY

Most corporations are organized to engage directly in the production of goods or the rendering of a service. In the early history of corporations, they were generally not allowed to hold the shares of other corporations except by special act or in severely limited circumstances. The widespread relaxation of these rules has resulted in the organization of corporations which hold the shares of other corporations for the purposes of control. Such corporations are called "holding companies." The term is not applied to financial corporations that are organized for the purpose of owning a more or less diversified list of corporate securities for investment. An operating corporation also is not called a "holding company" merely because it has incorporated a department as a subsidiary corporation or otherwise controls subsidiary corporations through share ownership.

The term "holding company" is generally restricted to a corporation which, although it may have important

*Holding companies are corporations that control operating companies, but are not primarily operating companies themselves.*

*Pyramiding of holding*

*companies in public-utility field has had much unfavorable criticism.*

operating functions of its own, is not primarily an operating company, but instead controls operating companies of considerable size. It is possible to have a pyramiding of holding companies. In the field of public utilities, this pyramiding has been the subject of criticism, much of it justified, because of the power which might thus be acquired over the subsidiary corporations and the possibilities of manipulating security prices. The object of a true holding company goes beyond investment, and holding companies are to be distinguished from investment corporations. Aside from the public-utility field, outstanding examples of American holding companies are the United States Steel Corporation and the General Motors Corporation. The first of these also has important direct operating functions. The holding company affects the policies of its subsidiaries, not only through directors elected by the holding company as a shareholder, but also through the supplying by the holding company of contractual management and engineering services.

The holding company may be used for one or more of the following purposes:

*Holding companies, however, may serve some important purposes.*

- (1) to effect an integrated relationship among several corporations where a merger or consolidation of several corporations may be difficult or otherwise inexpedient because of location, type of activity, or other consideration
- (2) to facilitate financing where the amount of necessary capital is large (Where share capital is desired issues of a large well-known company may command a better market than those of smaller and less-known companies. The holding company may also be able to borrow at advantageous rates for the benefit of the subsidiaries, either on an unsecured basis or by pledging the shares of its subsidiaries. The integration effected by the holding company may also improve the credit of the subsidiaries.)
- (3) to make unnecessary a compliance with state rules as to foreign corporations, which would be required if a large corporation had operating units outside the state in which it was incorporated



- (4) to retain the benefit of the name and good will of existing companies
- (5) to integrate facilities, effect management economies, and stabilize and diversify business volume and earnings

### COOPERATIVE ASSOCIATIONS

Nearly every business corporation represents the combined capital and effort of numerous persons. The corporation is essentially a democratic institution, both because corporate organization is available to any group and because as corporations grow larger and their securities are more widely distributed anyone with a small amount of savings can obtain a stake in the enterprises of the nation. Our securities markets likewise facilitate participation or withdrawal from the enterprise.

The particular types of business corporations known usually as "cooperative associations," although incorporated under general laws and having some distinctive features of organization and administration, do not differ so much from other corporations as is frequently supposed. Like other corporations, they exist for the economic advantage of their members. It is possible under the corporation laws of most states to accomplish many of the purposes of the cooperative association under the general corporation statutes. Indeed, many cooperative enterprises are simply ordinary corporations with special charter provisions regarding dividends, management, transferability of shares, and distribution of profits.

The essential idea of the ordinary corporate enterprise is that it does business with anyone and distributes profits to its members on the basis of capital investment. The essential idea of the cooperative association is that its earnings, after expenses and reserves are deducted, are distributed to members on the basis of patronage. The amount of products delivered to or the amount of consumers' goods or services received from the association determines the extent of the member's participation in the ultimate distribution. Although the technical legal situation is usually that the association buys from or sells to its

*Cooperative associations also are incorporated,*

*but earnings are distributed to members on basis of patronage, rather than to shareholders.*

members, in reality it is generally a selling or a buying agent for its members with a view to reducing the cost for these agency services. Some cooperative associations are created merely to render a service at cost; for example, cooperative grain elevators. Others, typified by certain dairy cooperatives, are bargaining agents for their members.

Cooperative associations frequently do business with outsiders as well as with their own members. This is a complicating factor which should not be overlooked in considering the privileges and immunities claimed for such associations.

*Producers' cooperatives are more numerous, but consumers' cooperatives have been organized, mostly in farm areas.*

A majority of cooperative associations in the United States are incorporations of groups of agricultural producers; but there are also consumers' cooperatives, many of which are agricultural, especially for the distribution of farm supplies, including petroleum products. Some agricultural associations have both producers' and consumers' divisions. In recent years, chiefly due to the activities of the Rural Electrification Commission, there has been a considerable development of consumers' cooperative electric companies. Reports of the Farm Credit Administration indicate that in 1943 there were more than 10,000 farmer cooperatives in the United States, whose gross business in 1944 amounted to about 5 billion dollars.

In England, since the founding of the Equitable Pioneers' Society of Rochdale in 1844, there has been an important growth of consumers' cooperative stores. The present Rochdale system engages in both wholesale and retail enterprises, as well as manufacturing. While cooperative retail stores have been established in the United States, the noncooperative units engaged in retail distribution in the United States operate on such a small unit profit and are so efficient in large-scale distribution that cooperative general stores, on the whole, outside some largely rural areas, have been unable to compete successfully with any advantage to their members.

*Other types of cooperative associations*

Besides American institutions entitled cooperative there are many American corporations which are cooperative in purpose and effect. Among these perhaps the most

noteworthy are mutual insurance companies by which in fact the insurers are the insured. The cooperative association has not proved thus far a practicable device for the organization of an enterprise requiring a large initial amount of capital for plant and equipment.

*include  
mutual  
insurance  
companies.*

Agricultural producers' cooperatives are of two main sorts: the federated and the centralized. In the federated type there are local associations which may be either members of a central membership association or its shareholders. The central association either distributes its earnings to the local associations on a percentage basis or deals with them as an agent furnishing services at cost. In the centralized type the individual producers are the members of the central association. Many cooperative associations also own subsidiary corporations; for example, warehouse companies and sales corporations which are organized under the general corporation laws. These corporations usually render services at prices close to cost so that they have little or no taxable income. Among the important regional federated associations are Land O' Lakes Creameries, Inc., California Fruit Growers Exchange, and California Walnut Growers Association. Among the regional centralized type are Sun-Maid Raisin Growers of California and the Dairymen's League Cooperative Association, Inc., of New York. Most of the large tobacco, wheat, cotton, and rice associations are of the centralized type. There are hundreds of local farmers' cooperatives, such as creameries and grain elevators.

*Farm coopera-  
tives may be  
either fed-  
erated or cen-  
tralized.*

Most of the development in farm cooperation dates from the period immediately following World War I, though a number of the most successful associations have a longer history. Practically all states have one or more general laws under which cooperative associations can be organized. These laws have many uniform features. The Commissioners on Uniform State Laws presented to the legislatures a Uniform Agricultural Cooperative Association Act in 1936, but, because of the high degree of uniformity already existing, this proposed statute has not been widely adopted. This law is now designated a model rather than a uniform law.

In general the producers' cooperative associations



*In most cooperatives, instead of shares, membership certificates are issued, transferable only to eligible persons with permission of the association.*

*Usually each member has one vote, and voting by mail but not by proxy is allowed.*

*According to state and federal laws, ordinary activities of cooperatives*

have no share capital, although it is usually possible to have preferred or even common shares, as long as the dividend is limited usually to not more than 8 per cent and the patronage dividend principle is preserved. Membership is open only to the producers of a particular commodity or to those who own or control land on which the commodity is produced. The cost of membership is nominal, usually \$5. Members receive membership instead of share certificates. There is not such a great difference in this respect from the ordinary corporation as may be thought, because in any corporation the member's interest is an intangible interest conveniently represented by a piece of paper. The difference is that the ordinary share certificate is freely transferable. The membership certificate can be transferred only with the permission of the association and to one eligible for membership. One of the difficult legal problems of cooperatives is to determine the member's interest in the association's reserves when the certificates are transferred or purchased by the association.

Most cooperatives adopt the one-man, one-vote rule, even if there is share capital. This is not required by all state laws although it is a condition of the federal Capper-Volstead Act of 1922. Proxy voting is usually prohibited and votes by mail generally allowed. The articles of association usually prescribe in considerable detail the type of contracts with members and the rules as to withdrawals, deductions for reserves, and distribution. It is the frequent practice for producers' cooperatives to buy members' products and pay to them after the crops have been sold the average price received for the grade and quality received, less permissible deductions. Agency contracts are also common and often the member may select one or several plans for a particular delivery.

### *Privileges of Cooperative Associations*

Both state and federal laws provide that the ordinary activities of the associations are not to be deemed violation of antitrust laws. The Capper-Volstead Act gives the Secretary of Agriculture jurisdiction to consider complaints that associations have employed monopolistic or restraint-of-trade practices resulting in undue price

increases. After hearing he is authorized to order the offending association to discontinue its monopolistic practices. The Department of Justice has jurisdiction to invoke judicial machinery to enforce this order. Cooperative association laws, both state and federal, provide special protection for contracts between members and associations and prohibit discriminations of various sorts against the associations by warehouse companies and others. There is also a federal statute prohibiting discrimination by boards of trade and commodity exchanges.

Cooperative associations generally are charged less than ordinary corporations as a fee for organizing and are usually exempt from annual franchise taxes. Since cooperative corporations make no profits in the technical sense, they would probably not be subject to the usual corporation income taxes, under the present legal definition of income, even if they were not specifically exempt, which they are under both state and federal laws. The federal revenue acts also exempt cooperatives from excess-profit taxes. Since the commodities handled by producers' cooperatives are presumably taxed to the growers, they usually pay no property taxes on the commodities they are holding for sale, even if they are the technical owners.

Resentment has been expressed because of favoritism which it is alleged state legislatures and Congress under political pressure have shown to cooperative associations, thus unfairly improving their competitive position in respect of other business. The slight advantage cooperative associations enjoy in the matter of franchise taxes is perhaps not clearly justified but is relatively unimportant. Their income-tax position by itself is in marked contrast with the federal policy of taxing corporate profits twice, if distributed as dividends. Even under the present definitions of income the tax exemption allowed agricultural cooperative share corporations on the amount distributed to shareholders as limited dividends is a clear discrimination. The Department of Agriculture makes available, free to farmers' cooperatives, a great deal of legal, statistical, and other advisory service. Loans to cooperative associations by government agencies at low rates of interest represent some discrimination, although this is balanced to some

*are not in restraint of trade, and discrimination against cooperatives by warehousemen and exchangers is prohibited.*

*Cooperatives are exempted from some forms of taxation, including profit taxes and property taxes on goods held for sale.*

*Government gives some competitive advantages to cooperatives.*

*This favoritism should be reexamined and adjusted to the end that all types of competitive enterprises have equal protection in a free market.*

extent by the Reconstruction Finance Corporation's authority to make general business loans. On the side of the cooperative associations it must be admitted that some of their assertions as to unfair competitive practices from which they have at times suffered from noncooperative business are probably well founded.

What should be recognized is that the cooperative association is simply another type of business corporation which should be allowed to establish itself if it can maintain itself by its own efforts. It is entitled to no better, and should be subject to no more burdensome, treatment by government than any other incorporated group. If it can improve production and distribution and make money for its members by good organization and efficiency, government should not interfere to protect existing middlemen from cooperative competition. On the other hand, government should not weight the scales against the cooperatives' competitors. Numerous cooperative associations would indorse this position. They neither need nor desire governmental subsidies or governmental contral. Free enterprise demands that the cooperative association take its chances in a free market. Friends of cooperative associations recognize that competing business has a legitimate cause for complaint in the cumulation of government favors which they enjoy, especially in the matter of tax exemptions. Not only do the cooperatives frequently make a technical profit on their business with nonmembers, but their privilege of making deductions for reserves which can be invested in valuable property, such as warehouses, stores, exchange memberships, and other marketing facilities, can give them important competitive advantages. The whole matter of government favoritism to cooperative associations deserves to be reexamined and adjusted to the end that government shall do no more for these enterprises than for their competitors.

#### THE MODERN CORPORATION IN THE AMERICAN ECONOMY

*Spread of corporations*

Critics of corporations have concerned themselves with many questions, but among the most important are



the control of corporations to prevent monopoly, restraint of trade, and unfair competition practices; the protection of investors from unfairness by promoters, directors, officers, and other insiders; the regulation of the securities markets to avoid manipulation of the prices of corporate securities and dangers to the nation's credit structures from speculation in such securities; the taxation of corporations and corporate shareholders; and the possible threat to American political and governmental institutions through the concentration of wealth and power in the corporate system.

It might be an interesting exercise for the reader to write down the articles or services he utilizes from the time he rises in the morning to the time he retires at night and to think about how many of them are available to him as a result of competition and in which of them he believes unfair charges have been imposed upon him. There will be little in such a record to justify any belief in oppression by corporate conduct. In respect of such articles as clothing, soap, razor equipment, typewriters, motor cars, and furniture, he certainly does not suffer from lack of competition, poor quality, or unduly high prices, except in isolated cases. As far as public-utility charges are concerned, although the utilities sometimes are monopolies, their rates are now generally fixed by public authority. Without minimizing the necessity of resistance to the abuses of monopoly, it is evident that any assumption that American corporations customarily operate to the disadvantage of the consumer is unwarranted.

The problems of protection of investors from misrepresentation and manipulation of securities have been considered by the courts, by legislatures in connection with the passage of blue-sky and other laws, and by the federal government at the time of enactment of the various statutes now administered by the Securities and Exchange Commission. This Commission has supplemented the federal law with numerous regulations. Existing law seems to provide ample protection to investors, as well as adequate safeguarding of the nation from speculative excesses. There is indeed reasonable doubt whether some existing regulations might not be relaxed without detriment to the public

*raises questions about monopolistic practices, disregard of investors' interests, manipulation of securities, taxation of corporations, and concentration of economic power.*

*The ordinary citizen, in regard to the goods and services he uses, can find little reason to complain of corporate operations.*

*Investors are now adequately protected by state and federal law.*

***Present tax policies are unfair to corporations and their shareholders, and check business expansion; also confiscate potential venture capital and penalize economic adventure.***

interests involved, in view of the evidence that the scope of present regulations imposes unnecessary burdens on capital formation and investment and undue obstacles to free markets in securities.

Taxation of corporations, especially by the federal government, cannot be treated apart from an examination of other aspects of tax policies. The present practice of taxing corporate incomes, both to the corporation and to the shareholders who receive dividends, is an indefensible example of government discrimination between different types of business organization. Wartime corporate excess-profits taxes, whatever their justification as a war measure if continued, would have substantially checked the growth of small businesses, and deprived corporation of any chance of expanding production sufficiently to maintain the scale of employment essential to American prosperity. Confiscatory rates of personal-income taxation and the oppressive tax provisions in respect of capital gains deprive the nation of venture capital, which must be provided if the free-enterprise system of the future is to match its splendid achievements of the past.

Two phases of the problem of concentration of wealth and power in large corporations, and indirectly in a comparatively few persons, have engaged the attention of thoughtful students. The first, and perhaps the one of lesser importance, relates to the perpetuation of control by management; the second, to the aggregate of property owned and the proportion of business done by large corporations. The first involves the exercise of power by those whose actual shareholdings may be comparatively small; the second involves concentration of ownership. The first is largely a matter of investor protection, the latter is of greater importance to the nation at large.

### *Management's Control and Compensation*

***The perpetuation of control by management through proxies has***

If a corporation has many shares, widely distributed, it is relatively easy for the directors to perpetuate their power. Proxies are usually solicited by the management in advance of the meetings of shareholders, and in ordinary course the managers or their nominees are authorized to

vote shares constituting a large majority of the quorum. This not only ensures the reelection of the directors or the election of new directors favored by the management, but has occasionally enabled those in control to put into effect bonus, profit-sharing, and pension plans, and options for share purchases which increase their compensation much beyond their salaries. Such arrangements have been the subject of considerable criticism and have been several times attacked in the courts, sometimes successfully. During the war period of high income taxes there was adverse comment on share-option and pension plans, on the ground that in some cases they are devices for escaping taxes. Although it is not charged that there is anything unethical in adjusting compensation plans to take advantage of privileges permitted by existing law, it is feared that Treasury hostility to such plans may result in further tax legislation, for example, in respect to capital gains, which might have an unfortunate effect upon the economy as a whole.

The determination of the worth of an administrative or inventive genius to a corporation is a matter of great difficulty. Such men have a wide choice of employment, to say nothing of their opportunities for engaging in private business of their own. Their services to a corporation are an economic asset to the whole nation. They mean larger and more efficient production, which benefits shareholder, worker, and consumer. They add to the country's taxable resources. A corporation certainly should be allowed to compete for the services of such men by offering appropriate rewards. The following principles, which it is believed are at present generally controlling, are suggested as a fair summary of the considerations that should be weighed in appraising corporate compensation to management:

1. The compensation of corporation executives should be in line with the value of services rendered.
2. The compensation of corporation executives should be comparable with the earnings available to men of parallel ability in independent business or in the professions.

*aroused much criticism; so also has the compensation of management.*

*Corporations face competition in securing adequate men for executive positions—including competition of opportunities for such men to take up enterprises of their own.*



*Executives' compensation should be in line with services rendered; comparable with outside opportunities; related to net incomes of companies under their management; and properly supplemented by incentive pay.*

3. The compensation of corporation executives should be related to the net income of the corporation to which the executives contribute. It is recognized that in some cases the executives may be worth a large compensation because of the ability to mitigate losses or to build a small corporation into a great one.
4. Incentive methods of remuneration, in conjunction with straight salary, are often practicable, equitable and desirable.
5. Arbitrary rules by government limiting compensation of corporation executives are contrary to the best interests of the public and of the corporation.
6. Excessively high income-tax rates should not make it difficult to compensate executives in proportion to their contribution to the most advantageous utilization of the corporation's resources.
7. Corporation executives, as far as feasible, should show their confidence in the enterprises in their charge by investing in the corporate shares.

*Shareholders have many protections against overreaching by management. Widespread complaint among them can be effective.*

Corporation shareholders are by no means without remedy for overreaching by corporate managers. Present equitable rules, aside from statutes, allow a periodic review of profit-sharing plans of indefinite duration. Present proxy regulations applying to most large corporations require the management to give to the shareholders full information as to the compensation paid to all officers and directors and to indicate the shareholdings of such persons. In addition, the shareholders receive at least annually, and often quarterly, balance sheets and income statements. The reelection of directors is generally due to the satisfaction of the shareholders with management or to the absence of any known alternative. There is no evidence of any widespread shareholder complaint about corporation salaries. Even where these seem large, they are generally only a small fraction of the corporation profits of the greater corporate enterprises. In the case of large corporations the securities markets afford an easy method for the shareholder to withdraw and transfer his investment elsewhere.

Such a market condemnation, if at all widespread, may itself effect a reform in managerial policy. Public opinion as expressed in the business community itself has considerable influence. For example, the potential evil of the issuance of shares having neither a preference nor voting power has been largely eliminated by the refusal of the New York Stock Exchange to approve applications for the listing of such shares. Education of shareholders, so that they can read and understand corporate reports and realize their responsibilities and powers, can contribute much to the eradication of unfortunate managerial tendencies. Shareholders may demand and receive public explanation of matters that trouble them. In several instances the management of corporations has been changed in consequence of vigorous shareholder action. The reserved power of shareholders is by no means negligible.

The proposed remedy of limiting corporation salaries to a statutory maximum, for example, \$25,000 (after taxes), as advocated by certain radical groups, is essentially undemocratic. It would prevent the rise of men of ability from the ranks to places of economic power. It is still the rule rather than the exception that the top corporation executives have reached their positions from the bottom rather than from original wealth or family influence. Government salary limitation would prevent corporations from competing for needed talent and stifle industrial initiative and ambition. Such a proposal is a thinly disguised scheme for leveling people irrespective of character, training, and capacity, and for redistributing property by government fiat. Any possible danger of undue accumulation of wealth and excessive concentration of economic power can be fully met by other means.

### *Centralization of Corporate Power*

On the larger question of centralization of business activities in large corporations, several observations are pertinent in advance of statistical review. The United States is a big country. Big business is a natural concomitant of the nation's size and the abundance of its resources. In such a country certain enterprises—for example, steel

*Statutory limitation of executive salaries would check competition for talent.*

*As to centralization, in so large a country various types of service can be*

*provided  
efficiently only  
by large  
aggregations  
of capital.*

*Statistics show  
no impairment  
of the vitality  
of small  
enterprise.*

*Corporate  
concentration  
is restricted  
to certain  
industries, and  
even in these  
competition is  
likely to be  
keenest.*

manufacturing—cannot be conducted efficiently except by large business units. The necessary capital cannot be found except by the cooperation of many investors. In the field of public utilities especially, the public convenience cannot be served by a multitude of small enterprises. This is notably true of transportation by rail, water, and air and of power development and distribution. Statistics on the progressive growth of large-scale business often mislead uncritical readers who fail to note how much of this increase comes from the growth of public utilities, in respect to which the public will, as expressed by government, has demanded concentration.

Figures on business growth fail to substantiate the frequent assertions that big business is destroying small business or that big business itself is increasingly owned by a few people. The growth in number of business concerns from 1800 to 1940 has almost exactly paralleled population growth.

At the beginning of World War II there were approximately 3 million business concerns in the United States of which 2.7 million, or 90 per cent, may fairly be called small enterprises. About 500,000 of these were corporations. In retailing, approximately 86 per cent were small establishments. In manufacturing as a whole, 82 per cent were single-unit businesses and 98 per cent employed 250 persons or less. These figures do not meet the point that large corporations tended to do a larger percentage of the total business, but they are significant as indicating the continued vitality of small enterprise.

The Twentieth Century Fund in 1933 estimated that 594 corporations with assets of 50 million dollars or more owned 53.2 per cent of all *corporate* assets and produced 18.4 per cent of the total national income. In 1939 it was estimated that 737 such corporations owned 58 per cent of corporate wealth. When one breaks down these figures however, and eliminates transportation and other public utility companies, the percentage of big business is much smaller than first appears. Furthermore, one should note that the corporate concentration is restricted to certain industries, for example, motor-car manufacturing, steel, cigarettes, and mining. In contrast, many industries



remained predominantly small-unit enterprises. While the eight largest cigarette-manufacturing companies employed 99.4 of the employees of the industry, the six largest women's clothing manufacturers employed only 3.7 per cent. Incidentally, it may be observed that the keenest competition exists among the business giants.

Again, big business by no means assures permanent power. Of the 101 largest industrial corporations in 1919, 20, or about one fifth, went into receivership or bankruptcy or were otherwise reorganized with a writedown of capital, before the end of 1934. Finally, big business, far from being owned by a few, is increasingly owned by the American people in general.

The number of Americans owning corporate shares is generally estimated at about 8 to 9 million. This does not appertain to the interested individuals the shares owned indirectly for them by insurance companies, philanthropic institutions, banks, and other financial corporations. There are about 26 million individual shareholdings in the United States, each shareholder having about three different corporate interests. Figures regarding shareholding of record often suggest a concentration that is far from the fact. The largest shareholders of record are often institutions or nominees, such as stock brokers, whose nominal holdings may represent the interests of thousands of individuals. Stockbrokers' holdings, while they include shares held for speculation, are often shares held for owners, who for various reasons of business convenience do not transfer shares to their own names.

The number of persons who own corporate shares has steadily increased from an estimated 4 million in the early twenties to more than double that number at present. TNEC, in its *Monograph* 29, estimates the following number of shareholdings:

1900 .....	4,440,000
1923 .....	14,400,000
1928 .....	18,000,000
1937 .....	26,000,000

Numerous corporations have over 100,000 shareholders. The American Telegraph and Telephone Company, for example, has approximately 700,000 shareholders. Forty-

*Big businesses, like small, are mortal, and they have the most widespread ownership.*

*Uncountable millions are direct or indirect shareholders in business corporations.*

***Opportunity is democratically open to acquire a stake in American business, sharing its risks and its profits.***

one per cent of all corporate dividends in 1937 were received by persons having incomes under \$5,000 or by endowments and other nonprofit institutions. In respect of the national income as a whole, it is estimated that 80 per cent is received by persons with incomes of \$5,000 or less. In many corporations, employees have an important and increasing minority interest. The wide distribution of corporate shares and the existence of excellent security markets make it possible for any American, even if his savings are small, to acquire a stake in American business. While he must share its risks, he also has a democratic opportunity to participate in its profits.

## V EMPLOYMENT RELATIONS

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### I. BACKGROUND

This chapter deals primarily with persons who work for wages. It is true that under the American Individual Enterprise System some persons work for themselves, but more are employees of others and are paid a wage or a salary for working for others. Thus, Mrs. Jones employs a maid; lawyer Perkins employs a stenographer; farmer Brown employs a farm helper; the lumber company hires a sales-

*Some persons  
work for  
themselves;  
more work  
for others.*



man; the railroad hires a ticket agent; the manufacturing company employs a mechanic.

In each of these cases there is an employer and an employee. The employer may be an individual, a partnership, or a corporation. In each case, someone has agreed to work in return for pay.

*An employer may be an individual or a group.*

In each case of employment for wages there are an employer and an employee. The employer may, in fact, have many employees, even thousands; in the cases of many corporations the "employer" is really thousands of stockholders or owners. Sometimes there are more stockholders than employees—and some of the employees may also be stockholders. (As to the different kinds or types of business enterprises in which an employment relationship may exist, see Chap. IV.)

### *Features of the Wage System*

*The wage system involves agreements between employers and employees, competition for labor and jobs, legalized rights and duties, and freedom on both sides to sever relationship.*

The wage system, as established in this and some other countries, has these characteristics:

- (1) An agreement to work for someone else and an agreement to pay for such work
- (2) Competition of employers for workers and of workers for jobs—the means of competition including wage rates, working conditions, future prospects, and social standing
- (3) A legal framework of rights and duties so that the State enforces some of the conditions of employment and, if questions of violation of contract are involved, acts if called on by one of the parties
- (4) Regularization of compensation received by the worker, so that the amount to be paid is available for use shortly after the work is completed and, moreover, is assured in advance so that the worker can plan his own expenditures with confidence
- (5) Severance of the employer-employee relationship at the option of either party, subject to certain legal or intangible limitations and customs
- (6) Ability of the employee to change employers, either

in the same town or industry or in another town and industry

The wage system has developed and become prevalent under capitalism for the following reasons:

1. The wage system meets the needs of capitalistic industry, since an adequate working force can be assembled readily and specially skilled workers are normally available when needed without special training by the individual enterprise.
2. The wage system meets the needs of individual workers by providing regular and immediate income, also the opportunity to secure appropriate financial recognition for special skills and individual ability.
3. It favors specialization of function among different workers and thereby improves productivity.
4. It encourages a high level of performance by individuals by increased reward for greater accomplishment. It is a fundamental of human nature that the promise of reward is more effective in promoting activity than the threat of punishment.

*The wage system permits assemblage and maintenance of adequate working forces, provides workers regular income, and recognizes special skills.*

### *Capitalism and the Wage System*

The capitalistic system has thrived in association with the wage system for these reasons:

1. The capitalistic system provides adequate inducement for responsible enterprisers and thereby develops capable managers.
2. Directing capitalists are provided with the means of competing with each other by the wage system, and thereby the rewards of the most efficient directing capitalists are in proportion to managerial ability and, in some cases, are therefore relatively large.
3. More individuals have opportunity for individual ability to be recognized—a desire common to all individuals—than under any other system.

In fact, it may be said that the rise of the capitalist system was a powerful factor in the abolition of slavery, since the capitalist directors realized that the efficiency they sought could be secured only by inducements furnished through the wage system (cf. de Tocqueville,

*The capitalist system has thrived along with the wage system, because it develops responsible enterprisers and competent managers, provides rewards for competitive efficiency, and opens maximum of*

*avenues for recognition of individual ability.*

*Democracy in America*, Vol. III, pp. 156-173; Adam Smith, *Wealth of Nations*, Book I, Chap. VIII). Accompanying the wage system we find freedom of contract and liberty of movement—two important assets of the American workman and his family.

### *Magnitude of Employment*

*More than one half of U. S. population over fourteen are included in the "labor force"; that is, the number of persons regularly working in gainful occupations or seeking gainful work.*

The magnitude of employment—both those who were self-employed and those who worked for others in the United States—may be gathered from March 1940 statistics, which reflect prewar conditions.

First, as to the proportion of the population in the "labor force" normally available:

Population, fourteen years or over .....	101,102,924
Labor force .....	52,789,499
	or 52.2%

The "labor force" is not confined to those who work for wages or salaries; that is, those who work for others as their employees. The term is defined by the National Industrial Conference Board as "the number of people regularly at work at gainful occupations or seeking gainful work." It includes doctors, lawyers, family workers on farms, active firm members, and self-employed who work for a profit, but excludes women doing their own housework; according to the Bureau of the Census, these women are not considered to be "gainfully employed."

Of the 48,313,425 persons 14 or over in March 1940 who were not in the "labor force," the largest proportion (28,931,869, or 59.7 per cent) were engaged in housework in their own homes, and a considerable proportion (9,013,342) were in school. The balance (10,368,214) were either unable to work, or inmates of institutions, or not classified and not reported. Out of the total number of females over fourteen (50,549,176), only 12,845,259, or 25.4 per cent, were in the labor force. Of the 37,703,917 girls and women not in the labor force, by far the greater part (28,664,744, or 76.0 per cent) were engaged in their own housework.

During the week of Mar. 24-30, 1940, the "labo



force" fourteen years of age or over was divided as follows:

Employed .....	45,166,083
Unemployed .....	7,623,416

Of the "unemployed" 2,529,606 were engaged in so-called "emergency work," and the remainder were listed as "seeking work."

The 45,166,083 "employed" persons were divided as shown in Table 1. Of these "employed" in the official sense

TABLE 1

	Number	Per Cent
Agriculture, forestry, and fishing .....	8,475,432	18.8
Mining .....	913,000	2.0
Manufacturing .....	10,572,842	23.4
Construction .....	2,056,274	4.4
Transportation, communications, and other public utilities .....	3,113,353	6.9
Trade, wholesale and retail .....	7,538,768	16.7
Finance, insurance, and real estate .....	1,467,597	3.3
Business and repair services .....	864,254	1.9
Personal service .....	4,009,317	8.9
Amusements, recreation, and related services .....	395,342	.9
Professional and related services .....	3,317,581	7.3
Government (not elsewhere classified) .....	1,753,487	3.9
Industry not reported .....	688,836	1.5
Total .....	45,166,083	99.9

of the term, 33,726,151 were wage and salary workers who can be considered as "employees" and 9,756,761 were employers and workers on their own account. The largest number in the latter group were farmers; the balance, mostly independent professional men and women, small shopkeepers, and men running their own small factories without employees. In a somewhat doubtful category were 1,444,090 unpaid family workers, largely boys and girls working on farms for their parents. A relatively small group (239,081) were not classified.

Certain trends in connection with the labor force are also worth noting:

a. For the last three decades there has been a decrease in the proportion of the total population of working age comprised in the labor force.

*In 1940 employment was divided into many groups. The largest were in agriculture, manufacturing, and wholesale and retail trade. About 60 per cent were employed in these three fields. About 75 per cent worked for salaries and wages.*

*Percentage of population in labor force has decreased during 30 years, with*

*relatively fewer under twenty, fewer over sixty-five, but more women.*

b. The proportion of workers under twenty years old has declined.

c. The number of women in the labor force has increased.

d. The number of gainful workers over sixty-five has decreased and will presumably continue to do so under the social security program.

It is also worth noting that only 23 per cent of the employed were in manufacturing; it is "worth noting" because of the all too prevalent tendency to assume that manufacturing is properly to be made responsible for furnishing so-called "full employment to every one in the labor force."

The actual number and percentage of government employees, as reported by the Bureau of the Census, is far too low, since about half of the government employees in 1940 were classified by their occupation rather than as employed by the government. The average number of government employees during the year 1940 was 3,656,000. During the war period there was a great increase in the number of governmental employees, especially in the federal service. While in January 1940 there were 3,694,000 governmental employees, in June 1946 there were nearly 5,500,000 (excluding the military services). Fully half of these were federal employees.

Of the workers employed in manufacturing in 1939 about half (48.6 per cent) were employed by establishments with under 250 wage earners; 16.1 per cent by establishments with from 250 to 500 employees; 24.9 per cent in establishments with from 500 to 2,500 employees, and only 10.4 per cent in plants with over 2,500 wage earners (*Statistical Abstract*, 1944-1945, p. 795).

### *International Comparison*

Although there is little information available on the relative efficiency of labor in different countries, the following estimate of prewar production per industrial worker (employed in the "preparation of products for further manufacturing or for the ultimate consumer") in different countries is of interest (by Dr. Ellsworth Huntington in the *Annals of the Association of American*

*Prewar production per individual worker was greater in U. S. and Canada than in any other*

*Geographers*, March 1943, except that for easier comparison the figures have been transferred from Colin Clark's international units and the United States rated as 100):

Canada.....	101	Ireland.....	40
United States.....	100	Australia.....	39
New Zealand.....	80	France.....	30
Norway.....	53	Hungary.....	23
Great Britain.....	41	Rumania.....	23
South Africa.....	40	Estonia.....	23

*country; more than double that in Great Britain, over three times that in France.*

## II. BASIC PRINCIPLES OF EMPLOYMENT RELATIONS

Except marriage and family relationships no relationship of adult life is more intimate than that involved in employment—the hour-by-hour, day-by-day, month-by-month association of the employee with fellow employees and with his employer and the latter's representatives.

The employer-employee relationship cannot, therefore, be properly considered simply as an abstract algebraic problem; it is a human relationship and not merely a contractual one. It involves psychology as well as economics.

The best-devised principles and plans for relationship between employers and employees will fail if supervisors are not tolerant, wise, and fair; if the employees are not treated as human beings, instead of robots; if outsiders stir up antagonism and discontent where none existed.

But it is equally true that the best-intentioned and most cooperative employees and supervisors and managers will fail to achieve industrial harmony and industrial efficiency, if certain basic laws of employment relations are not recognized and practiced—laws which recognize the facts of economics, the fundamentals of psychology, and the welfare and worth of the individual. Violation of these laws by government, employer, or employee will be detrimental to the entire national economy.

A code of principles reduces the fundamentals of sound employment relations to definite and fairly concrete forms. They provide a basis for checking the soundness of specific aspects of employment practice and for the

*Employer-employee relationships involve psychology as well as economics.*

*A sound employment policy should be based on*



*these 21  
principles:*

development of detailed application of employment policy. Each employer should have a sound, well-defined employment policy, adapted to particular needs and conditions and based on the following principles:

*Background*

*1. Primary function of industry is to produce goods and services for public.*

*Principle 1. The primary social and economic function of industry is to produce goods and services for the public.*

*2. System will be best supported that supplies people's wants with least exertion.*

*Principle 2. People tend to support that industrial system which they believe will gratify their wants with the minimum productive exertion.*

*3. Satisfactory employer-employee relations must rest on mutual fairness.*

*Principle 3. Mutually satisfactory relations between employers and employees must rest on a desire by each to be fair with the other.*

*4. And on mutual good will.*

*Principle 4. A spirit of good will between the employer and the employee is extremely important in establishing and maintaining mutually satisfactory employment relations.*

*Observations.*

*a. Personal pride is promoted when employees know about accomplishments of the employer.*

*b. Personal interest in the welfare of the employer is advanced when employee advice is requested and where opportunity for advancement is provided.*

*c. The employer should extend recognition to special accomplishments by an employee and should give adequate reward for better work.*

*d. Employee morale will be increased if an effort is made to locate and promptly adjust individual grievances*

*Specialization*

*Principle 5.* Assigning to each employee the manual or mental operations which he is best adapted to perform, physically, mentally, and psychologically, improves the quality and increases the quantity of output.

*5. Quality and quantity of output will be best when each employee works at tasks he is best adapted to do.*

## Corollaries

*a.* The average worker accomplishes most when assigned a definite and reasonable amount of work to be done in a given time.

*b.* Highest quality and greatest output from a job or production center are secured when employees are selected carefully, and where practicable in accordance with predetermined job specifications.

*c.* Efficiency of production of goods and services is increased wherever management can and does select, shift, retain, and reward employees on the basis of their productive competency.

## Observations

*a.* Modern science has made great progress in pretermining aptitudes for specific tasks. Employers should utilize these techniques so far as practicable.

*b.* We need much more study and accurate knowledge of the mental and physical aspects of repetitive work.

*c.* Most employees will probably do their best work when assigned only one mental and physical operation, or very few such operations. There are individuals, however, who do not work very well or usually very long at tasks which do not involve a fairly wide field for manual or mental effort.

*d.* In nearly all cases individuals are happiest, most contented, and most efficient when engaged on the work they are best adapted, physically, mentally, and psychologically, to perform, particularly since that work will also give the greatest material reward. This is especially true when opportunity is also provided for growth and advancement.

## Productivity

**6. Individual productivity is highest when worker is doing the most valuable class of work for which he is fitted.**

*Principle 6.* The highest productivity of an individual worker is secured only when he is assigned to the most valuable class of work for which his natural abilities fit him. Determination of the most valuable class of work must allow for the possibility that even more able workers may be available to take care of more important classes of work. In such cases the most valuable total product may be obtained by assigning a worker to a job that utilizes a secondary skill; that is, some workers will have to utilize their primary, others their secondary skills.

## Corollaries

*a.* If two or more workers can do a particular job properly, the real labor cost of production for that job is lessened by using the least skilled workmen in the group, thus leaving the more highly skilled workers for the jobs requiring greater ability.

*b.* If workers of different degrees of skill are being assigned to jobs requiring different degrees of ability, the most efficient utilization of available man power and the encouragement of efficiency require that the most highly skilled workers be assigned to the most exacting jobs.

*c.* Maximum quantity and quality production in the future as well as at present can be secured if individual workers are given opportunities to show latent skills and to advance to positions requiring greater skill.

*d.* Average individual productivity is increased and average costs of production are reduced if production is free from practices which limit production, interfere with lawful employment, or restrain the individual from fitting himself for any vocation or skill for which he may be adapted.

## Wages

**7. An adequate wage incentive tends to secure maximum output.**

*Principle 7.* An adequate wage incentive for the accomplishment of a definite task influences a workman to maintain his maximum output.



*Principle 8.* The wage of prime importance to the employee is the "real wage," or the amount of necessities, comforts, and luxuries which he can obtain in return for the money paid him by the employer.

*8. Wages must be measured as "real wages"—in terms of purchasing power.*

*Principle 9.* Money wages tend to decline when the supply of labor increases in relation to the demand; they tend to rise when the supply of labor decreases in relation to the demand.

*9. Money wages tend to rise or decline according to demand for and supply of labor.*

*Principle 10.* The normal wage level of each country is determined by and corresponds to that country's general average value of output per unit of labor employed.

*10. Normal wage level is determined by value of output per unit of labor.*

#### Corollaries

*a.* The wage level will increase or decrease as total per capita national production is raised or lowered.

*b.* Production precedes wages, and efforts to increase wages without also increasing production cannot be permanently successful for all industry, and can be successful for certain groups only at the expense of other groups of wage earners.

#### Observations

*a.* The total cost of production of an article is a combination of the cost of labor and other factors of production.

*b.* Comparative national general productivity figures must give full consideration to both unit labor costs and the unit costs attributable to other production factors. This involves a consideration of such questions as managerial efficiency, interest charges, tax burdens, and social legislation costs.

*c.* The interests and welfare of the worker are indissolubly associated with those of the employer and the consuming public.

**11. Increased physical capital used raises wage rates.**

**Principle 11.** The more rapid the increase of physical capital used in industry, the more rapidly wage rates increase.

Corollaries

*a.* The amount of mechanization in industry tends to vary directly with the amount of financial capital employed.

*b.* Increasing mechanical devices per worker increases the individual and total output and raises the national wage level.

Observation

Effective mechanical devices per worker may be increased by

- (a) increasing the amount of machinery or equipment per worker; or
- (b) improving the quality of equipment per worker; or
- (c) increasing the efficient use of equipment—only by a combination of two or more of the above.

**12. An employer can pay wages only as long as he can find purchasers of product at price that covers costs.**

**Principle 12.** An employer can continue payment of wages only so long as able to secure purchasers of the product or service provided at a price sufficient to meet wages and other production costs.

Corollary

An employer acts as an agent who assists in the procurement of a product by its purchasers; he is a middle man standing between wages and other production costs on the one hand, and the prices consumers will pay on the other.

Observations

*a.* An individual company may temporarily be able to continue operations and the payment of wages even though operating at a loss, if it has accumulated "rain day" reserves or reduces its assets; it may so carry on in the

ope of business revival, or to reduce losses, or to aid the community in which it operates.

*b.* Industry as a whole cannot continue the payment of wages even in times of good business unless the price received is sufficient to cover costs of production; nor will new enterprise be undertaken unless prices are, in addition, sufficient to induce the investment of capital.

**Principle 13.** In any large group of workers there are differences of natural ability and capacity.

*13. Workers differ in natural ability and capacity.*

**Principle 14.** Wages received by individual workers tend to be in proportion to their different accomplishments, other factors being equal.

*14. Wages tend to be proportionate to workers' different accomplishments.*

#### Corollaries

*a.* Management should at all times endeavor to proportion individual reward to individual production.

*b.* In addition to endeavoring to relate individual pay to individual accomplishment, management may also properly take into account such factors as arduousness, hazards, and responsibility of the work.

**Principle 15.** When the individual worker believes his differential productive ability is recognized in the pay received, his effectiveness in cooperative effort is stimulated.

*15. Recognition of a worker's differential productive ability increases his cooperative effectiveness.*

#### Corollaries

*a.* Compensation for employees should include a basic rate, with additional reward above the basic rate when possible for individual or group efficiency.

*b.* Wage plans should be based on such simple rules that the worker will have no difficulty in determining, unaided, the money due him for doing a job.

*c.* Standards of performance should be set which can be attained reasonably and consistently, with no change of such standards unless a material change has previously occurred in conditions, methods, or equipment.



### *Hours of Work*

**16. Within proper limits, increase of working hours raises workers' scale of living.**

*Principle 16.* All other factors influencing production remaining constant, a decrease in the hours of work increases the leisure of the workers, and an increase in the hours of work increases their material scale of living, provided undue fatigue is avoided and reasonable time for recreation exists.

### *Training*

**17. Thorough training increases employees' interest and efficiency.**

*Principle 17.* Thorough training of employees increases their interest and effectiveness and tends to reduce the amount and cost of supervision required.

#### *Corollary*

Special attention should be given to adequate training of all those in supervisory capacities, in respect both to production problems and to the best means of dealing fairly with those under their immediate supervision.

**18. Total cost of training new workers varies with labor turnover.**

*Principle 18.* The total cost of training new workers in a plant is reduced or increased as the rate of labor turnover is reduced or increased.

#### *Corollaries*

a. As health and safety among workers are increased and industrial fatigue is lessened, turnover tends to be reduced.

b. Turnover tends to be reduced when good working conditions are maintained—such as personal conveniences which appeal to the self-respect of employees, proper lighting, ventilation, and workroom temperature and a high standard of orderliness and cleanliness.

c. As workers and management place increased confidence in each other, labor turnover is reduced.

d. As management is able to stabilize the production curve, the yearly turnover rate tends to be reduced.

*Employee-management Cooperation*

**Principle 19. Best results in economical production are obtained when there is voluntary cooperation between workers and management.**

**Corollaries**

*a.* Cooperative effectiveness of management and workers is promoted by educating each in the aims, purposes, and problems of the other.

*b.* Adequate provision within the individual plant or joint consideration by employees and management of matters directly affecting the conditions of employment promotes effective cooperation in production.

**Observations**

No single fixed method of providing for employee-management consideration of "matters directly affecting the conditions of employment" is generally preferable.

Factors such as size of plant, general intelligence of workers, capability of management, state of industrial development of plant, previous labor relations history and policy—all so affect the matter that it is unwise to recommend a single method for universal application. What works well in one place might fail in another.

We simply submit as a basic proposition that "adequate provision" for consideration should exist. It might be on an individual basis in one place of employment, on a group basis in another. If on a group basis, it might be on plant, company, or industry basis. In any event, whatever method of joint consideration is used must depend for its full and continuing success upon a spirit of "good will" and a "square-deal" attitude upon the part of both management and employees.

*Responsibility*

**Principle 20. Responsibility of management for the execution of work must be accompanied by authority to control and direct the means for doing the work, within the bounds of professional standards and legal requirements of safety.**

**19. Voluntary cooperation between workers and management is best way to economical production.**

**20. Responsibility of management must be accompanied**

*by adequate authority.*

Observation

Management in this connection embraces all grades of supervisory personnel, including foremen.

*21. Wise leadership, able to use full ability, is essential.*

*Principle 21. Wise leadership, enabled to function at its full efficiency, is more essential to successful operation than is extensive organization or perfect equipment.*

### III. THE WAGE SYSTEM

#### HISTORICAL DEVELOPMENT IN THE UNITED STATES

*The wage system has developed in connection with the distinctive economic development of the country.*

In Chapter II we reviewed the major aspects of the historical development of the American Individual Enterprise System. In the present section we present only a brief history of some of the main developments and trends which have been a part of, or have directly influenced, the development of the wage system in this country.

1. Colonial America was chiefly a land of farmers. Laborers who were employed by others were either wage earners, indentured servants, or slaves (mostly found on Southern plantations). In early New England efforts were sometimes made to fix both wages and prices by law, but they were failures. During the Revolutionary War efforts, also failures, were made to fix prices, including wages, by law.

*The spread of the factory system in the nineteenth century worked a revolution in methods of manufacture; it was aided by the development of transportation.*

2. During the colonial and Revolutionary periods virtually all industry was in the domestic or handicraft stage; it was chiefly the making of things by hand; the workers worked alone or in very small groups; the workman usually owned his own hand tools; there was little division of labor. Each of these characteristics is the opposite of that prevailing in the modern factory system. Prof. Carlton puts it (*History and Problems of Organization of Labor*, Chap. III): "Steam, gas, or water power, not human energy, is the motive force which drives the machine assembled in the factory." This factory system developed during the Industrial Revolution, starting



this country after the Revolutionary War. The first successful textile mill in the United States was built in Rhode Island in 1790.

3. The development of improved means of transportation has had a great effect on employment. On the one hand, it has permitted the location of factories in areas where there is little labor, since workers can be drawn from a considerable distance. On the other, it has widened the worker's choice of employment, permits him to live away from the factory, and preserves family life, since the members can change jobs without having to leave home.

4. Although the first labor unions in this country were organized in the latter part of the eighteenth century, for all practical purposes it is safe to say that, certainly in present form, unions hardly existed before 1825. National labor unionism with the ability to last more than a decade or so really began with the birth of the American Federation of Labor in 1881. This organization was primarily an effort to organize all the nation's workers in a particular trade (carpenters, mechanics, printers, etc.) into a single union (which, of course, might have both state and local divisions), and then to have all these "trade" unions joined in the national "federation." The first major split-off from this type of union has come since 1935, with the development of the Congress of Industrial Organizations, a federation of unions of all workers in a single industry (steel, automobiles, etc.). The old Knights of Labor, which reached its peak in 1886 with 600,000 members, had the same basic type of structure as the C.I.O. but died out rapidly as the A.F.L. movement expanded. Another major difference between the A.F.L. and the C.I.O. is that the former generally (except for unsatisfactory national endorsements in 1908 and 1924) avoids supporting any particular political party, proceeding on a nonpartisan basis, while the C.I.O. becomes more directly a political partisan (as witness the activities of the C.I.O. Political Action Committee). As a very general proposition it may, moreover, be stated that the A.F.L. relies to a less extent than the C.I.O. on legislative favors and support to obtain its ends, and more on its ability to persuade,

*Labor unions existed throughout nineteenth century, but no durable national unions until the A.F.L. was organized in 1881, as a federation of craft unions.*

*The Knights of Labor, reaching a peak in 1886, aimed to organize industries rather than crafts. The C.I.O. was more successful.*

*The railway unions and some others are independent of A.F.L. or C.I.O.; so are various unions composed of employees of their respective companies.*

*Employers' associations have opposed especially unions' demand for a closed shop.*

*Since 1910 all or nearly all states have enacted much*

or compel, employers to make the agreements its constituent unions consider satisfactory.

Virtually independent of the other unions of the country are the great railway unions, comprising both operating and shopcraft employees. Some of them are entirely independent, while others are technically affiliated with the A.F.L. The word "technically" is used advisedly, since in all matters relating to transportation these unions operate in conjunction with other railway unions, but entirely outside of their A.F.L. connection. At different times various unions split off from their other affiliations; the International Typographical Union, for example, left the A.F.L. but returned to it; the United Mine Workers left the Federation, unsuccessfully sought reinstatement in 1944, but achieved it in 1946. There are likewise a large number of unions confined to the employees of a single company—such as the Weirton Steel Company, where the independent union has opposed the C.I.O. steel union; the Philadelphia Rapid Transit Company, where the independent union concluded in 1944 a bitter fight against the advancement of Negro employees; and the American Telephone and Telegraph Company (whose union does admit some members from telephone companies not members of the A.T. and T. system). Many of the independent unions are very powerful; several abortive efforts have been made to establish a federation of such unions.

5. Many employers' associations were formed to deal with labor unions, and after the great coal strike of 1902 opposed labor-union demands for the closed shop. The public, as a whole, has opposed the monopolistic closed-shop idea (that only union members can be employed), but nevertheless Congress passed in 1935 the Wagner Act, which as administered has not only promoted labor unionism as a whole, but has also promoted the closed shop (the nature of which is discussed subsequently in this chapter).

6. During the past three decades (1910–1940) every state except one (Mississippi) has enacted workmen's compensation laws; every state now has an unemployment compensation act; all states have old-age ass-

ce grants supplemented by federal grants-in-aid; and the federal government has an old-age pension plan. Additionally, protection is provided through federal statute, or state laws, or a combination of the two, against the hazards resulting from maternity and blindness, and for assistance to destitute mothers of orphaned children. In these ways many major worries have been reduced for the workman and his family. It is possible that in the long run provision of this assurance through legislation will decrease the ability of labor unions to induce workers to join voluntarily, since they can no longer claim that union membership is necessary to protect workers and their families against economic vicissitudes.

7. The federal government has also enacted a minimum wage act, which is now being interpreted to cover virtually every type of employment and which is further considered later in this chapter.

8. As factories grew in number and size, an increasing proportion of the labor force became employed in manufacture and a decreasing percentage in agriculture. The decline in the percentage of agriculturally occupied in the labor force began after 1820; the percentage of the labor force engaged in manufacturing increased until 1920, and then began to decline up to the opening of the defense and war production efforts.

9. With the growth of factories and the later growth of labor unions, there has been an increasing number of strikes, and increasing public concern over methods of preventing, diminishing, or alleviating them. Each great wave of strikes—the coal strike of 1902 and the steel strike after World War I are examples—has been followed by popular resentment against labor unions. In World War I the labor unions in both England and the United States seemed to be “holding up” the government—and to a large extent got away with it—but popular resentment became evident after the war was over. Some people believe history is repeating itself after World War II.

10. During World War II the government tried to control both prices and wages, with some measure of success in the case of prices, but with wage costs rising much faster than prices. From 1939 to 1943, according to

*protective legislation for labor: workmen's compensation, unemployment insurance, old-age assistance, etc.*

*The federal government has added important measures, such as the law setting minimum wages.*

*With an increasing proportion of the people engaged in manufacturing, strikes became more frequent and the public more resentful of them.*

*During World War II the government tried to control*



*both wages and prices, but wages rose faster than prices.*

Bureau of Labor Statistics data, the cost of living advanced 24.3 per cent, while weekly earnings in manufacturing industries rose 81.2 per cent. In World War I the cost of living rose much more; during the period 1914-1918 it increased 49.7 per cent, with the weekly earnings of factory workers increasing 51.6 per cent.

WAGE HISTORY

The National Industrial Conference Board states (Research Report. No. 20, p. 2) that "weekly earnings, carefully prepared, however, are . . . more useful than either hourly rates or hourly earnings in studying the income conditions of the workers." Weekly earnings, for four selected groups, by decades since 1790, have been shown in Table 2.

*The record of weekly earnings of four important groups of labor shows a substantial rise in nearly every decade.*

TABLE 2\*

Decade ending	Carpenters	Printers	Skilled factory workers	Unskilled factory workers
1799	\$3.69	.....	\$4.26	\$3.37
1809	5.61	.....	6.47	4.86
1819	6.02	.....	6.94	5.72
1829	5.72	.....	6.60	4.63
1839	7.49	.....	8.65	5.10
1849	8.15	\$10.28	8.59	4.95
1859	9.22	11.05	9.57	5.92
1869	13.58	14.82	13.49	8.24
1870	15.51	17.05	14.87	9.30
1889	14.64	16.07	13.95	8.93
1899	15.21	16.04	13.78	8.72
1909	21.41	17.78	15.52	9.77
1919	26.65	25.41	22.72	13.69
1929	51.20	46.87	35.10	23.10
1939	57.54	43.83	28.56	18.78

\*For amplification of this table see the appendix to this chapter.

Two points deserve special note in connection with Table 2:

*The provision of improved power and*

1. Increased wages are definitely related to increased or improved equipment. In 1914, for example, there was 2.5 horsepower per employee in manufacturing establishments.

ents; by 1939 this figure had increased 92 per cent, investors and management having provided 4.8 horsepower per employee. During the same period production per man-hour increased still more (the percentage increase from 1919, the first year for which data are available, to 1939 being 129 per cent), while average hourly earnings increased 151 per cent. A special survey of ten industries by the National Association of Manufacturers showed that between 1914 and 1937 output per worker in an hour increased 123.5 per cent; average hourly earnings of factory workers in 25 manufacturing industries (National Industrial Conference Board, 1944-1945 *Economic Almanac*, page 215) increased 181.4 per cent.

2. In Table 2 we consider only money wages. These constitute the most important single cost in the productive process and must be paid out of current income or preceding savings. In the computation of money wage increases over several decades it is impossible to indicate the real change which has occurred in the manner of living. For example, the change from candle light to oil lamps, to gas, to electricity cannot be shown, nor can we see in such wage figures the increased quality of the goods purchased. And money wages are, moreover, by no means the entire real income of wage earners. Among their other sources of income are the convenience and agreeableness of working conditions, services (such as libraries, parks, and garbage collection) obtained from government, and many others. All these must also, in the final analysis, be derived from, and paid out of, the productive process.

### WAGE THEORY

Wages are a distributive portion of the total value of goods and services produced, or of the total social income. They are often defined as the income reward for human effort expended in economically productive activities. In this sense, the salary paid to the office man as well as the income of the skilled or unskilled manual worker, the portion of rents collected which may be assumed to reward the landlord for the personal effort expended in managing his property, the portion of part-

*machinery has been a great factor in the raising of wages.*

*And the rise in money wages has been accompanied by other additions to workers' real incomes and paid for likewise out of the production process.*

*Wages are a distributive portion of the total value of goods and services produced.*

nership profits that may be assumed to be the reward for personal effort, etc., constitute wages. This is obviously not the intent of the definition, despite the fact that the reward for the expenditure of human effort may be hidden in some general over-all return. More commonly, however, the term "wages" refers to amounts paid to hired employees for their personal services, and more especially to amounts paid to hired employees for manual services. The term is thus subject to different connotations. The economist frequently uses the word wages in the former sense "income reward"; the businessman and the wage earner himself usually have the latter definition in mind. For convenience the term will be used in this section to refer to amounts paid to hired employees, although much of the discussion will be applicable equally to the concept of wages in the larger sense.

The general economic philosophy of wage payment in a capitalist system is directly related to the ideas of long-run social progress. The specific wage principle which is a consistent part of this economic philosophy is termed the "productivity-irksomeness" principle.

### *The Demand Side*

*Worker is not, but the service rendered is, a commodity.*

Prices are paid for goods or for the services of goods and laborers. The price of the service of the railroad is called "fare"; of the lawyer, "fee"; of the laborer, "wage". One buys a horse in order to get the services of the horse, but he does not buy the railroad, lawyer, or laborer in order to get the services of these, for he can buy the services directly at a price. The laborer himself is not a commodity, but the service he renders is.

*The demand for labor may be direct, as personal service one wants from a tailor; but mainly it is derived, the ultimate pur-*

The demand for labor is either *direct* or *derived*. Thus, a consumer may demand direct personal service from a tailor, a gardener, servants, etc. In the main, however, the demand for labor is derived; it is desired because the product of labor is to be consumed by the demander, but because it is expected that the product will be sold at a profit. The fact must not be overlooked, however, that the appearance of this relationship is deceptive. Although most of the modern struggles in which labor has been involved have been with the employer who buys



product of labor for the purpose of selling it, the ultimate purchaser of labor is the consumer who purchases the product sold by the employer. The ultimate demand for labor and the wage price of labor rest with the consumers and depend upon the amount they are willing to pay for the final product. In the competitive market, therefore, the consumer plays a big part in establishing the level of wages.

Derived demand will involve employment of that quantity of labor which is believed to be demanded indirectly by the consumers in the quantity of goods or services they will purchase. It thus stands as a sort of middleman between labor and the consumer. In making their decisions, employers will not only be guided by their judgment of the labor quantity which they believe consumers will want; they will also be motivated by the profit which they can make in acting as middlemen. It will be found profitable to expand the demand for labor up to the point where the product of any additional unit of labor employed can be sold for just the amount paid for the labor, after paying all other costs.

Consumers will usually take increased quantities of a product of labor only at a reduced price. This attitude or policy on the part of consumers sets a definite limit on the wages the employer can pay. Wages thus tend to be fixed at an amount equal to the price paid by consumers for the product, after all other costs have been computed. That is, the employer will not keep on employing labor if the additional or marginal units produced cannot be sold for enough to pay for the labor and all other costs.

It has sometimes been argued that it is unjust to pay the laborer only the value of this additional or marginal product. An employer could, however, not be expected as a consistent and continuing policy to pay wages greater than are justified by the price he expects to receive from the consumer who ultimately buys the laborer's product. To do so would mean that the employer would shortly go bankrupt and could employ no one. The employer must enter into the market and buy materials and labor and other things which he seeks to combine and mix in proper proportion. He will then expand his production as long as he

*chaser being the consumer to whom the employer sells the product.*

*So the consumer plays a large part in determining the level of wages.*

*The employer as a middleman must be guided in wage payments by what consumers will pay for the product of labor. And he will be guided by regard also for what may be*

*left to him as profit in order to continue his business.*

can make a profit and expect to continue to do so out of expanded operations. If he attempts to expand too far or too rapidly, the entire community in which the plant is located suffers.

It is also sometimes argued that it is unjust to equalize the wages of all the laborers of a given class with the marginal product of the marginal man. But here, too, since it is assumed that all men of a given group are alike, ignoring differences in their respective efficiencies, all should share alike. To the extent that there are differences in their efficiencies, the laborer exhibiting the greater efficiency is really equivalent to one plus, double, or more of the marginal man and should receive an equivalent additional increment of wages.

*This requires economy in the purchase and use of every factor of production.*

The criticism is sometimes offered that employers are unable to determine the marginal worth, that few employers ever think in terms of marginal product. There is probably a considerable element of truth in this criticism. However, it is hardly sufficient to invalidate the marginal productivity principle. Employers should certainly be capable of comparing receipts and expenses and thus of determining whether or not their business is profitable. If a business is not profitable, or if it is not sufficiently profitable, it is likely that the businessman will try to take steps to adjust his affairs so that the desired results will be secured. This is, however, far from an easy matter, since many items of overhead cost are fixed; it may be impossible to obtain material for less, and he must pay at least the going rate of wages. Inefficiencies will probably be eliminated first. If this does not produce the desired result, an effort will be made to reduce wages or some laborers will be discharged. Although the whole process is often largely a trial-and-error process, it is likely that adjustment and readjustment will continue until the business reaches the point of greatest long-run profitability. As a matter of fact, in a state of dynamism, or progress, adjustments and readjustments are going on almost all the time.

*Competitive forces tend to bring about*

Theoretically, the principle appears to be sound. Practically, however, many forces exist which tend to cause a gap between the wage paid and the worth of the

marginal product of labor. Fear of future developments, sympathy, friendship, inertia, ignorance, the more or less constant dynamic change in conditions, etc., may all be expected to play a part in producing a margin of difference. It should therefore not be thought that there is to be found a rigid application of the principle, but rather that there exists a tendency for competitive forces to bring about such a result, though there is a range within which variations may exist.

### *The Supply Side*

The supply of labor is assumed to be dependent upon the quantity of population, the quality of the population, and the extent to which the various portions of society are able and willing to devote themselves to labor, under the wage and other conditions existing at any time. Some early orthodox economists believed the fertility of the human race to be such that the population, and thus the supply of labor, tended to expand to the point where the influence of the principle of diminishing returns and the marginal productivity of labor would cause wages to be fixed at an amount just sufficient to cover the bare minimum required for the existence of the worker. A wage above this point, it was thought, would contribute to an increased population by encouraging a greater number of births and by reducing the death rate. A wage below the minimum point of subsistence would contribute to such a decrease in the birth rate and to such an increase in the death rate that wages would be raised to the point where they would again cover the minimum required for existence. The long-run tendency, therefore, was for wages to coincide with the minimum subsistence requirement. This principle was known as the "iron law of wages." Marx and Engels in the *Communist Manifesto* declared that the modern laborer, "instead of rising with the progress of industry, sinks deeper and deeper below the conditions of existence of his own class. He becomes a pauper, and pauperism develops more rapidly than population and wealth."

Whether as economist or historian or prophet, the

*the necessary adjustments, and a range for variations exists.*

*On the supply side, some early economists believed that the supply of labor tended to expand so as to keep wages down to a subsistence level.*

*This "iron law of wages" was accepted by Marx and Engels.*



***Experience refutes this theory except in backward countries and areas.***

***Counteracting forces prevent the supply of labor from reaching the saturation point as the rising standard of living of labor in civilized countries shows.***

judgments of Marx have been discredited by experience—yet his influence is still tremendous. Ricardo and some others did not press the principle so far as Marx, but held that the lower limit of wages was fixed by the worker's ordinary standard of living. The supply of labor was then believed to be, to a considerable extent, a function of the total population and the latter a function of the wage level. Higher wages tended to increase both the population and the supply of labor, and lower wages tended to decrease both the total population and the supply of labor.

Historical experience makes it obvious that the "iron law of wages" oversimplified the problems involved on the supply side and that it further reduced them to too mechanical and formalistic basis. Although the principle is currently substantiated in some of the more backward countries where the worker lacks either opportunity or incentive for improving his standard of living, as well as among some workers in civilized countries, the historical developments of the nineteenth and twentieth centuries in most of the more civilized portions of the world confirm the fact that counteracting forces of progress prevent the supply of labor from reaching the minimum standard-of-living saturation point. The rising standard of living of labor in civilized countries stands in contradiction to the iron law of wages.

It must not be concluded that the principle is now without some foundation, however. Remove the counteracting forces and the principle would apply. One has only to point to backward countries to confirm this belief. The influence which the desire for an improved scale of living has had upon births and the beneficial effect which invention and research, increased managerial ability, and improved operating technique, etc., have had upon productive output have together created a situation far better than that portrayed by the iron law of wages. For that we can be thankful. So long as we do not reduce our resources in proportion to our population and do not handicap technological improvement, we do not need to fear in the United States that our population will be too large to permit high or rising scales of living.

### *The Productivity-irksomeness Principle*

In any discussion of the principles governing wages, it is necessary to consider why it is that in the United States the average number of hours worked per week has diminished so greatly during the past century. Undoubtedly the shortening of the work week has come at the behest of the workers. But why do they now prefer to work 30 to 40 hours instead of 50 to 80 as formerly? The answer is that at any given time and place the typical working time is determined by the relationship of the utility of the worker's pay to the irksomeness of his labor.

The principle may be illustrated by the case of a factory worker engaged in piecework and allowed to work as long as he likes. Let us assume that he can turn out 10 pieces per hour and that he is paid 10 cents per piece, thus earning \$1 per hour. The first \$4 that he earns are needed to pay for such essentials as rent and food. Each additional dollar earned covers less and less essential needs; in other words, the more dollars he earns the less utility does any single dollar have.

When he starts work in the morning, he is fresh and work is pleasant rather than tiresome. As the hours pass, however, the work becomes more and more fatiguing. Eventually he stops work. Why? Evidently because he has reached the point at which the irksomeness of the work approximately balances the utility of the pay.

Although such exact balancing cannot be attained for any group of workers, it nevertheless is true that the tendency is to establish a working week of that length which, for the typical worker, makes the utility of an hour's pay roughly balance the irksomeness of the last hour worked in the day.

When productivity and hence real hourly wage rates are low, men must work long hours to secure even bare necessities; hence the dollars earned have high utilities, and men work till they are much fatigued. On the other hand, when productivity and hence real wages are high, men prefer to work relatively few hours per week, for they now balance not only the irksomeness of toil, but also the pleasantness of leisure, against the utility of their pay.

In its practical application, the productivity-

*Another feature of the wage situation is the progressive shortening of the work week.*

*The typical working time is determined by the relation of the utility of the workers' pay to the irksomeness of his labor.*

*With increased productivity and higher wages, workers earn enough in fewer hours to provide necessities.*

*The utility of further earnings is progressively*

*reduced in  
the balance  
against  
irksomeness  
of toil and  
pleasantness  
of leisure.*

irksomeness principle is subject to limitations. Nevertheless it acts as a central force, to offset which counteracting forces must be brought into operation, and variation from which tends to bring into operation counteracting influences. Actually, of course, society is seldom static but mainly dynamic; change is the essence of things. Nor are men motivated solely by self-centered economic desires. Sympathy, fear, friendship, inconstancy, inertia, desire for change, accident, altruism, etc., all play a considerable role. Few men, also, are sufficiently well informed as to the economic status of affairs; ignorance is all too prevalent. These limitations, however, are not sufficient to negate the strong central pull of the principle, its justice, or its desirability. Just as democracy functions with reasonable efficiency in spite of all the limitations and weaknesses that can be arrayed against it, and they are many, so the productivity-irksomeness principle must be credited with having functioned with reasonable efficiency.

### *Wages as Cost of Production*

*Wages are a  
price or  
reward of  
labor service,  
but also a cost  
of production.*

*The price  
consumers pay  
is the ultimate  
source of the  
reward of  
labor.*

*The employer  
is a channel for  
transferring  
consumer's  
payments to  
workers.*

Thus far wages have been treated as a reward for labor service. It was stated, however, that most of the demand for labor is a derived demand which the enterpriser, a middleman, endeavors to satisfy. The latter, thus faced with the problem of translating the labor service into product form to be passed on to the ultimate demander, the consumer. The price of the product received from the consumer must therefore be considered the ultimate source of the reward paid to labor. The enterpriser (employer) stands in the position of making collections from the consumers and distributing these collections among the factors of production. The employer, in general, is thus a channel for transferring the payments which the consumer makes for labor to the laborer. In the long run, the upper limit for wages cannot be greater than the total of the collection made. In the usual case they must be somewhat less than this amount since there are rewards to be paid to the other factors of production as well. The portion of the collections received from the consumer which is turned over to labor as a whole ranges from 65 to 85 per cent of the total national income. From the over-



all viewpoint, it is therefore evident that wages as a whole cannot be greatly increased without changing the sum of the collections from the consumer. In other words, wages from the standpoint of the employer are a cost of production that must be recovered out of sales to the consumer if the employer is to stay in business.

There exists a modern tendency to deny this relationship between total costs incurred by the employment of labor and selling prices. It is probably true that in the practical world few changes in cost leave no other alternative than a change in selling price. Few industries are 100 per cent efficient and few situations 100 per cent economic. When pressure is created by a change in any cost, it is often true that certain wastes may be eliminated, that greater efficiencies can be obtained in one way or another, that machinery may be substituted for labor, etc., thus reducing total cost so that selling price need not be changed. To deny this is to deny the existence of imperfections. Currently and immediately, however, there is a limit to the possibilities thus afforded. Beyond this limit increases in cost must be reflected in change of selling price or in decreased profits. To the latter, also, there is a limit if the economic system is to continue to operate on the basis of individual initiative. This is evident from the fact stated above that wages alone constitute from 65 to 85 per cent of the national income, and from the further fact that the diversion of the total profits of industry to labor would wreck the industrial system and destroy jobs.

The real way for labor as a whole to get more is through an increase in national productivity. The Brookings Institution estimated that, if the profits of 1936 were completely diverted to employees, the increase to each working-class family would be less than \$3 per week (*The Recovery Problem in the United States*, p. 20).

The productivity principle is not to be thought of as counteracting a rising scale of living for the large mass of industrial participants. The benefits of improved methods of production and increased efficiency are passed on to consumers under the pressure of competition.

*Although other costs than wages may often be reduced to avoid rise in selling price or decrease in profit, wages alone constitute 65 to 85 per cent of the costs of goods and services and so possibilities in reduction of other costs are limited.*

*Nor could reduction of profits add substantially to wages.*

### *Wage Disparities*

***Disparities in wages are often questioned. The more disagreeable work often brings less pay; urban and rural areas have different pay scales; etc.***

***Among causes of these disparities are supply and demand of product or labor, and limits to mobility of labor from place to place and from one occupation to another.***

To many people it is puzzling why the person who does the hardest physical work, or the most disagreeable or dangerous, may be receiving much lower wages than others with preferable jobs; why the general practitioner of medicine in a country town must keep long office hours and spend many others riding his district for fees small indeed compared with what the city specialist gets for shorter hours all spent in his office.

These and like instances of disparate wages find their explanation in the wage theory set forth above. The workers tend to receive as wages the product of their labor, and the value of that product is determined in the market place, by the forces of demand and supply. The great abundance of a particular product will drive downward its price, and a scarcity force it up. If many workers are available to do a particular task, this will naturally have some effect on the wage that can be economically paid.

Our industrial society is divided into groups more or less distinct and noncompeting. Some groups are very large and entrance into them is easy; into others only relatively few can qualify for entrance. The division lines of these groups are based on natural or social distinctions. Some groups are set apart by race, color, sex, and inborn capacities; others by education and training and by tradition and family. Various degrees of difficulty are met in trying to move from one group to another, and the large groups are likely to be those of simpler qualifications. More people can qualify as ditchdiggers than as engineers, and the paucity of the latter group tends to keep the value of the product of the marginal engineer higher than the value of the product of the marginal ditchdigger.

If it were possible to move freely from one group to another, the wages in all groups would tend to be the same. The mobility of labor is, however, quite limited by the factors noted above, with the result that wages differ greatly from trade to trade, from place to place, from industry to industry, from sex to sex, etc.; and the only way to eradicate the differences in a free market is

reduce the barriers to the free movement between these more or less noncompeting groups.

Any scheme of forced distribution by government edict or support of certain pressure groups would be less equitable, economically, from the standpoint of the whole social body than would be the results obtained under the application of the productivity principle and competition. It is likely that the more forceful groups would benefit at the expense of the groups able to exercise little or no force. It is possible, of course, that the force efforts of some groups may serve to negate the force efforts of other groups. Still, certain groups would suffer—probably unjustly.

It should always be borne in mind that wages, in any case, cannot be greater than the sum total of production, and that in most cases they cannot be so great as total production since there are other factors that must and should be compensated. That wage system is likely to be best, therefore, which is most logically related to its effects upon productivity.

### SOCIALIST VS. CAPITALIST WAGE THEORY

The American Individual Enterprise System—a capitalist system—operates with a wage system. Since the socialists also advocate the remuneration of labor, it becomes important to see if there is any basic difference between the labor-payment concepts of capitalism and socialism.

According to Marx (*Capital*, Chap. 7, p. 2), "the value of each commodity is determined by the quantity of labor expended on and materialized in it, by the working-time necessary, under given social conditions, for its production."

Many fallacies are packed into this one sentence; for example:

1. It is not true that value is created by labor alone, with no contribution being made by government (protection, paid for by taxes), management (direction and organization, paid for by salaries), or stockholders

*Altogether, since wages can in no case be greater than values produced, that wage system is likely to be best which most logically and practically promotes productivity.*

*The Marxian concept of compensation for labor is based on the theory that "the value of each commodity is determined by the quantity of labor expended on and materialized in it."*

*But it is not true that value*



*is created by labor alone, regardless of other factors in production; or that value is determined by amount of labor alone, regardless of demand and supply of the product.*

*Nor is it true that all labor has the same value; or that value of a product is independent of time and place.*

*Leading modern Socialists do not accept the Marxian theory of value, but it continues to be used to justify demands for socialization of industry, for denial of returns to capital, for wage increases not based on productivity.*

(machinery and equipment, reimbursed, where profits are earned, by dividends).

2. It is not true, as Marx assumes, that value is measured by the amount of labor alone. The statement disregards the question of desire or demand for the particular article by prospective purchasers, and also the differing quantities and scarcities of the basic resources and materials used in producing different articles.

3. It is not true, as the statement assumes, that value is independent of the supply of an article—that an article is equally valuable if the same “quantity of labor” has been used in producing it, whether the supply is great or small.

4. It is not true that all labor, both skilled and unskilled, has the same value.

5. It is not true that value is independent of both time and place. (As to the forces creating values, as expressed in prices, see Chap. X.)

It is true that Marx himself qualifies and contradicts his own theory at various points, when he is faced with its logical unreality, and virtually repudiates it (Book III of *Capital*). Yet, even though false, it will, says the devoted Marxian, M. Beer, “for long have the force of truth for the masses and will continue to move them” (*Life and Teaching of Karl Marx*, pp. 129–131). Some economic writers still support it.

One of the leading modern Socialist apologists, H. Laski, thus inters the Marxian dogma (*Karl Marx*, pp. 27–30): “Upon Marx’s theory of value it is not necessary to spend much time. It has not stood the test of criticism; it is out of harmony with the facts; and it is far from self-consistent.”

Yet this false theory has been, and continues to be, used to justify demands for socialization of industry, for denying competitive—or even any—returns to capital investment, and for demands for wage increases which are not based on increased productivity resulting from the efforts or abilities of the workers themselves.

If the Marxian socialist state should be put in operation on the basis of the Marxian labor theory of value, then under it each worker would be supposed

receive a token for each hour of labor, and could exchange this for other goods on which an hour of labor has been spent. Under this system, the hour of the opera singer would be equal to that of the program seller; if people wanted products requiring more skill than that of the least efficient, or possibly the average efficiency, this desire would lead to "black-market" evasion of the socialist rule. The socialist state abandons the free market, in which laborers bargain with employers as to the value of their labor (as expressed in wages), and sellers bargain with purchasers as to the value of goods and services (as expressed in prices). If it finds that arbitrary equality of the value of all labor leads to declining production, because it removes all incentive to do better than the poorest, then it must adopt some other arbitrary method, seeking to reward labor according to the productivity and quality of the work rendered. It would still be an arbitrary decision by an omnipotent state; it would still be based on state decision as to what should be made, how much should be made, what could be purchased; it would involve the abandonment of all determination of value based on the supply of a commodity and the demand for it; it would completely destroy all freedom of labor; in a complex society, the decision could not be economically right, unless by accident.

In the American Individual Enterprise System labor can move from one occupation to another; the skilled worker can receive more than the unskilled; goods are valued in relation to their supply and demand. Under such a system there is incentive to reward greater efficiency in output; there is incentive to do more and better work; and the goods and services get produced which people want, with changes in such production when public desires change.

In the market-place economy of a capitalist system wages are based on the productive contribution of labor to the production of goods and services; under socialism it is based either on a precise and rigid ruling that all time spent should be paid for equally, or on an arbitrary and external determination by the state as to how much work is worth—regardless of any relative value users might accord to

*Under the Marxian system, one hour of labor is equal in value to another, whatever the occupation or skill of the worker, and the free market for labor and goods is abandoned. The State would determine what should be produced and how much, and what could be purchased, whether or not the theory of equal value was retained.*

*Under the capitalist system, workers are paid according to productive contributions;*

*benefit by competition among employers to make and sell products and use many kinds of labor; and are provided with means of production by the incentive to saving and investment.*

different goods and services. The worker will benefit most when there is competition among a number of employers to make many different products, and new products, and to use many different kinds and grades of labor. Society will benefit most under the stimulus to both production and labor in a system where there is incentive to produce, and to invent and improve.

Much popular reasoning, apparently based on Marxian philosophy, holds that all values are produced by labor and that, therefore, labor is entitled to enjoy all those values—specifically to the exclusion of profits paid to investors. What this overlooks is that the saving of values by individuals through deliberate abstention from current consumption is as necessary to having the tools of production as is the production itself out of which the saving is made. Of two who produce, one may consume his product while the other saves. Out of the saving come the tools with which labor can produce more efficiently. The increase of output is due both to labor and to the self-denial of those who provided the tools. To deny compensation for that self-denial is to extinguish it and hence to choke off the supplying of the very tools of production the workers must use if they are to produce abundantly. Wages are the inducement to workers to use the tools of production; profits are the inducement to investors to supply the tools of production. Both are essential for production; and neither can exist without the other.

### UNIONS' WAGE THEORY AND PRACTICE

Having presented the productivity wage theory of the American Individual Enterprise System and compared this theory with that of the Socialists, we now turn to a review of unions' and employers' wage theory and practice, followed by a consideration of collective bargaining and wages. The following notes relate to this review.

1. It is not a review of employees' and employers' wage theory and practice; but a review of unions' and employers' theory and practice. The unions have never comprised a majority of all employees in the country, but



they have represented the largest single segment of all employees.

2. For this purpose, partly because its history goes back to 1881 and partly because it is the largest group of union labor, we survey the records of the American Federation of Labor.

### *Review of A.F.L. Wage Pronouncements*

The American Federation of Labor's positions concerning wages and related problems (except hours) are fully revealed in the following extracts from resolutions adopted at its conventions, omitting reiteration of previously adopted positions.

1884

We believe the gaining of higher wages and shorter hours to be preliminary steps toward great and accompanying improvement in the condition of the worker.

1898

[Workers have an] inalienable right . . . to the product of their labor.

1903

The working people should resist any attempt to reduce their wages or to increase their hours of labor.

1904

The trade-union movement . . . endeavors to establish on the industrial field such equality and such opportunity as has been granted on the political field, not only theoretically, but in fact.

1907

The American workmen in return for their services to society demand a living wage, a constantly growing minimum living wage . . . We, therefore, demand from modern society a constantly increasing and larger reward as the result of our labor to our fellows.

1908

Wage reductions are not only injurious, but their resistance and prevention are the most rational and most rapid method of emergence from an industrial crisis or panic.

1912

The demand for higher wages represents our conviction that a constantly greater share of increased social wealth should go to those who create it.

*Labor unions' wage theory and practice may be reviewed first in terms of A.F.L. pronouncements:*

*Higher wages and shorter hours*

*Right to product of labor*

*No wage reduction*

*Equality of opportunity*

*Constantly increasing reward*

*Greater share to creators of wealth*

1919

***"Real wages"***

The value of wages is determined by the purchasing power of the dollar.

***No "piece basis"; fixed hourly rates***

The system of putting artisans upon a piece basis is most objectionable in private industry, and when put into effect in government departments is wholly unsuccessful and without justification. There can be no question that the proper method to be employed in government departments is upon a fixed price for certain hours of work.

Since the A.F.L. declared that a "piece basis is most objectionable in private industry," it follows that it is favored, for private industry as well as government work, wages based "upon a fixed price for certain hours of work."

1922 (Executive Council Declaration)

***Neither cost of living nor productivity the sole standard***

A wage based solely upon costs of living or subsistence or saving wage bears no direct relation to production or service rendered. However, a wage based upon productivity or service must accept as an initial standard a wage based upon human needs and aspirations . . . without reference to the other considerations that enter into a wage which compensates for productivity or service. . . . Productivity, service rendered, specialized training, and trade skill, the nature of the work, special irksomeness, unusual hazards and physical strain, and every other factor entering the value of the product or service, should form the basis for wage increments.

1925

***Real wages to increase and hours to decrease with productivity***

Social inequality, industrial instability, and injustice must increase unless the worker's real wages—coupled with a continuing reduction in the number of hours making up the working day—are progressed in proportion to man's increasing power of production.

1927

***Technical displacement must raise wages to increase employment elsewhere.***

Those who operate these improved methods of production must receive a sufficiently adequate wage to put those displaced at work at something else which the machine operators and others are able to buy [according to official explanation of wage policy by John P. Frey].

A rising wage rate, with its increasing purchasing power, is fully as beneficial to industry, to commerce and trade, as it is to the workers.

1931

***Wage reduction prolongs depression. Cost-of-living standard is opposed.***

To liquidate wages is to destroy the home market . . . impaired worker buying power deepens and prolongs depression.

1933

Opposing the use of a cost-of-living standard as a basis for determination of wages or salaries.

1934

Advancing wages should keep steady steps with expansion of productive efficiency.

There have been no policy-changing declarations since 1934.

*Wages should advance with productive efficiency.*

### *Contrasts in A.F.L. Position*

Analyzing the several American Federation of Labor positions we find that in 1907 it demanded "a living wage." This contention it formally abandoned in 1922 (when living costs were declining), and today it declares wages must be "in proportion to man's increasing power of production." This present theory was apparently adopted because the Federation leaders realized that its old idea, if carried out, would result in wage decreases. If by some entirely unforeseen set of circumstances the productive efficiency of industry should decline instead of increase, it is reasonably safe to suppose that the labor economists would inconsistently deny that wages should decrease; in all probability they would return to the now abandoned advocacy of a "living wage." Yet, as Prof. Irving Fisher of Yale declares (*Miller Builder-Economist*, July 1926, p. 3), "the penalty for keeping up wage rates when production is inadequate to support them, as in a depression, is, inevitably, unemployment. This itself is equivalent to wage reduction."

*In A.F.L. declarations living-cost basis was abandoned when living costs declined, and general productive efficiency was substituted.*

The Federation apparently recognized the distinction between real wages and money wages for the first time in 1919 when it declared that "the value of wages is determined by the purchasing power of the dollar."

Attention is further directed to the declaration that because labor is chiefly responsible for increases in production the wages of labor should therefore be related to the productivity of industry. The statements of its conventions and chief spokesmen may be scanned in vain for official statements that the Federation believes the wage of the individual worker should depend upon his individual productivity. Neither specifically nor by logical implication is there any evidence that the Federation has repudiated its 1919 declaration in favor of wage payment by a "fixed

*Individual productivity, however, is not recognized as fair basis by either A.F.L. or C.I.O.*



price for certain hours of work." The C.I.O. was demanding in 1937 and 1938 that all forms of piecework pay be abolished and only straight time used.

### *C.I.O. Wage Doctrine*

***C.I.O. wants "greater share of national income," opposes living-cost basis (1941), deplores differentials between North and South, and favors "equal pay for equal work."***

Since it is a much younger organization, the C.I.O. has not formulated a wage policy in as detailed form as the A.F.L.; perhaps also because it is younger, its policies adopted at different times do not reveal so many conflicts. There seems to be no C.I.O. conflict with the A.F.L. position, but the following C.I.O. recommendations may be noted:

1941

C.I.O. policy must continue to be based on the conviction that the working people shall have a greater share in the national income.

The C.I.O. must emphatically oppose attempts to tie wages to the cost of living.

The C.I.O. . . . deplores the existing wage differential between workers in the North and South.

1943

[The C.I.O. favors] where feasible, industry-wide stabilization of wage structures on the basic principle of equal pay for the same work.

1945 and 1946

Walter P. Reuther, since elected president of the United Automobile Workers Union of the C.I.O., declared that wages in any particular company should be based on ability to pay, and this idea received support from statements made by Secretary Wallace and President Truman.

The economic fallacies of this proposal were so numerous and so apparent that R. J. Thomas, then president of the U.A.W., declared (*New York Times*, Mar. 25, 1946):

"Adoption of the ability-to-pay theory will have resulted in the most drastic wage situation anyone can conceive in the auto industry. Our traditional theory is like pay for like work." (Thomas declared also that adoption of the principle would have reduced wages of auto workers in Ford, Studebaker, Willys-Overland, Hudson, and Nash.)

Support for the "ability-to-pay" theory as a basis for wage setting was further dissipated when Reuther admitted that his proposal (supported by President Truman) that the General Motors Corporation open its books to show the extent of its "ability to pay the wage demanded by the unions" was "just a maneuver to win public support" (*ibid.*).

***Recently an ability-to-pay basis for wages was proposed by Walter Reuther, but apparently only as a temporary maneuver.***

## Union Conflict

Although there are notable exceptions, by and large the A.F.L. is composed of craft unions, representing skilled workers, while the C.I.O. unions, being organized largely on an industrial basis, represent a majority of unskilled and semiskilled workers.

As a result, where the A.F.L. unions prevail, the primary tendency is to increase the wages of the skilled workers; where the C.I.O. prevails, the primary tendency is to emphasize increases in wages of the unskilled.

Under the C.I.O. theory, both the incentive to become skilled and the incentive of the skilled to increase their production are lowered. Even though under the A.F.L. theory itself the degree of incentive is reduced, it does, nevertheless, provide some incentive to become skilled.

From the standpoint of economic principles, therefore, the A.F.L. wage theory is superior to that of the C.I.O., since the existence of a larger proportion of skilled workers in the total labor force tends to increase total production and, therefore, the living standards (more properly, perhaps, the "living scales") of the entire population; furthermore, as the wages of the skilled are raised, the wages of the unskilled tend to increase also. The A.F.L. itself does not enunciate these ideas, but they are the logical result of application of A.F.L. theory.

In a subsequent section we analyze the monopoly aspects of collective bargaining, and their detrimental effect on other workers; we simply state here that as between the A.F.L. and C.I.O. wage theories the application of the former is, from an economic standpoint, likely to benefit more workers—or to harm fewer.

## Analysis of Federation Wage Theory

The American Federation of Labor, as we have seen, declared that wages must be based upon the productivity of industry—that as industrial productivity increases wages must increase. It can be fairly said that economists have for years recognized (1) that the only way in which the real wages of workers as a whole can be permanently increased is by an accompanying increase in the produc-

***A.F.L. policy tends to increase wages and number of skilled workers. C.I.O. policy tends to reduce differentials between skilled and unskilled, and thereby is more discouraging to productivity.***

***Economists have long recognized that real wages of workers as a whole can be***

*increased only as per capita productivity increases, and that then wages inevitably do increase.*

tivity of industry and (2) that, as the per capita productivity in industry increases, real wages inevitably do increase.

This theory has not been better stated than by Prof. H. L. Moore of Columbia University, a leading authority on the theories of wages, who declares (*Laws of Wages*, 1911):

A permanently increasing wage can be secured only by increasing the flow of the specific products of labor [p. 178].

Under free competition, or the hypothesis of least cost, each factor in production gets what it produces, and the results of our chapter show that so far as labor is concerned this tends to be the fact in the present industrial organization of society [p. 180].

With reference to individual workers, Prof. Moore makes the following observation:

The law of the natural difference in ability between individual laborers does find its expression in the apportionment of earnings among laborers in the present industrial state, and, furthermore, the congruence is remarkably close between the actual distribution of wages and distribution as it should be according to a *priori* theory [p. 184].

*Labor unions could increase total wages for labor by increasing total national output.*

Labor unions could increase total wages for labor as a whole by increasing the total national output. This could be accomplished by directly or indirectly urging and demanding or inducing employers to study means of increasing their operating efficiency, or by making suggestions for the improvement of productive operations, or by increasing the skill and efficiency of individual workers.

Such actions by labor unions would be a valuable contribution to social welfare. Unfortunately in practice many union activities are not in accord with this constructive policy; they even delay or impede efforts on the part of management to increase productive efficiency.

*But real wages in industry as a whole have increased rather in spite of, than because of, union ideas and practices.*

Real wages for industry as a whole in this country have increased and will continue to increase because of both increased use of improved types of plant and equipment and improved methods of operation and employment relations brought about largely by management, and in spite of, rather than because of, union production ideas and practices (discussed subsequently in this chapter).

The American Federation of Labor, in what it terms



ts "new wage philosophy" of 1925, as previously quoted, has simply recognized what most economists have maintained for years; namely, that labor as a whole and in the long run inevitably does receive "what it produces." Thus one of America's greatest economists, John Bates Clark, said many years ago (address before American Economic Association, 1888) that in a state of "theoretically perfect" competition both labor and capital get "an amount gauged by the product of its own final increment [and] under perfect competition the reward of each is virtually its own actual product." In other words, so long as free market operations continue, without arbitrary interference by either government or employer or labor, just so long will labor receive "its own actual product."

The A.F.L. has, however, refused to recognize the economic law that "difference in ability between individual laborers does find its expression in the apportionment of earnings." It still relies upon its old theory that "the system of putting artisans upon a piece basis is most objectionable in private industry." (As to the Soviet wage system, see subsequent discussion in this chapter.) The National Association of Manufacturers, on the other hand, declared 25 years ago (statement by President S. C. Mason, Philadelphia *Public Ledger*, Jan. 23, 1921): "Increased wages, by reason of the more efficient worker getting paid according to what he produces . . . means greater buying power and prosperity for the merchants and other tradesmen."

But although the American Federation of Labor in 1925 apparently came into line with one of the chief laws of wages, that wages progress "in proportion to man's increasing power of production," there is grave reason to believe that in its interpretation and emphasis of this law it may be led into errors which menace industrial efficiency and community prosperity.

1. Union statements often endeavor to convince workers and the public that employers are unwilling to increase wages as industrial productivity increases. The truth is that, in industry now as a whole, wages *do* increase with productivity and that employers *cannot*, even if they would, prevent such increase. Studies by Prof. Paul Douglas of the University of Chicago reveal that in the first

*A.F.L., agreeing that real wages rise with man's productive power, often misapplies the principle.*

*Union statements often claim that employers are unwilling to recognize this principle, but*

*studies show that it has been followed in industry as a whole.*

*Changes in supply of labor may affect average wage but not total, if other factors do not change.*

*Arbitrary increases for scattered groups of workers may lower the productivity of the industrial system.*

*Wage increases which increase production costs and prices do not increase total purchasing power or employment.*

*A.F.L. seems to urge that*

three decades of the present century American wage earners actually received in higher wages the amount of their increased value output—which differs from the physical volume of output (address by Dr. Douglas before American Statistical Association, Feb. 23, 1928).

2. While pointing out the relation between total production and total wages, the Federation neglects to consider that the much abused old "law of supply and demand" also enters into the control of wages. The Federation did pay some attention to this fact in its argument for restricted immigration, but now in its formally enunciated wage theory completely fails to realize that, other things being equal, an increase or decrease in the supply of labor available will lower or raise the average wage received.

3. The argument that wages as a whole should increase with increased productivity may be falsely used to urge increases in single industries. George E. Roberts, vice-president of the National City Bank, well said (1925 *Census of Manufactures*, p. 18):

Arbitrary wage increases for scattered groups of workers are not only unfair to other workers whose living costs are increased, but by affecting prices tend to disturb the flow of trade, to unsettle business, and to increase the instability of employment. In other words, they lower the efficiency of the industrial system to the general disadvantage.

4. The American Federation of Labor itself admits that only "real" wages are important, but there appears a tendency to forget this in many of the statements of union leaders. It must not be forgotten that wage increases which increase production costs and prices do not increase the aggregate purchasing power or enlarge employment. "Consumption, after all, depends ultimately upon production. However ideal may be our methods of distribution, if there is a check to production, the result is bound to be unfortunate. Equal distribution of little wealth means universal poverty. The first condition of general well-being is continuous output" (E. R. A. Seligman of Columbia University in *The World Tomorrow*, October 1929, p. 405).

### *Sharing the Benefits of Productivity*

In addition to these four errors in the wage position of the A.F.L. there are also serious objections to the appar-

ent Federation theory that the wages in any industry should be increased to correspond with any increase in the productivity of that industry, whether or not the rank and file of employees have contributed anything to the increase.

1. Certainly it should not be denied that if employers invest in machines which reduce the unit cost of production they are entitled to the major part of the saving which results. The separate conclusions set forth by two employee members of the Australian Industrial Commission, which in 1927 investigated American conditions, declare (*Report*, p. 50) with reference to the above subject: "To attribute increased productivity in America to the workmen would be misleading. Labor, skilled and unskilled, is efficient, but that efficiency is brought about by the high standard of machinery and equipment, management, organization, and supervision."

Prof. Slichter of Harvard has declared (addressing American Statistical Association, Feb. 23, 1928) that the primary and most important cause of the ability of industry to pay increased real wages in the decade of the twenties was the increase in managerial efficiency. Owing to the operation of economic laws which neither employers nor workers control, the latter invariably do have their real wages raised by increased industrial productivity, whether they have caused it or not. But to maintain that the workers are entitled to the *whole* benefit of increased productivity brought about by improved machines and methods would remove the incentive causing management constantly to study such problems; if either investment or management is denied adequate incentive, then industry will stagnate or decline and real wages remain constant or decrease. As a matter of fact, in the long run the greatest benefit to workers and managers and investors comes when they place primary emphasis upon providing increased benefits to consumers through providing more or better lower-priced products.

2. The Federation theory seems to imply that only by raising money wages can the benefits of increasing productivity be received by workers. It neglects to consider that the benefits of increasing productivity, with lower producing costs, may be made available to workers in the particular industry, to workers in other industries, and to

*wages in any industry should be raised to correspond with any increase in productivity in that industry, whether rank-and-file employees have contributed or not to increased production.*

*If labor received the whole benefit of increased productivity resulting from managerial efficiency and engineering technology, the incentive to such improvement would be removed.*



*Workers are interested mainly in wages as purchasing power and as determining a scale of living. High wage levels raise the scale of living only where they are the natural result of high productive efficiency.*

*Gains from productive efficiency in one industry should not be confined within that industry, or denied to consumers.*

the general public by means of falling prices or by increase in leisure or by other means.

The wage earner is interested in wages as purchasing power—in his “real wages” or “scale of living.” To increase the latter, the amount of wealth produced must be raised as a whole by an increased per capita output of marketable commodities (both goods and services). For industry as a whole the increased output must either precede or accompany increased wages; it is economic folly to maintain the either an isolated or general wage increase without an equivalent increase in output can automatically increase output and the scale of living. Wages can be paid only out of production—either concurrent or precedent; this means that they are paid out of receipts from customers.

Arbitrary insistence that wage increases, per se and without reference to precedent or concurrent production, will increase living standards and prosperity is arrant and misguided nonsense. High wage levels are beneficial only when they are the natural accompaniment or result of high productive efficiency.

3. A further proposal advanced by the Federation is that when machinery displaces workmen and increases efficiency the remaining workers should receive increased wages so they may buy more goods and thus create new employment for the displaced workers. The obvious answer is that the new buying power will be at least equally well created by a decline of prices to consumers.

This, of course, raises the very interesting ethical point as to whether the entire consuming public has a claim to the benefit of the new buying power superior to the claim of the comparatively few workers in the particular industry. Discussing this problem, Mr. Roberts said (*ibid.*, pp. 21, 22):

Confinement of the benefits to the individual industries in which they occur would mean a very uneven advance of wages in the industries, which of itself would be unfair and objectionable; moreover, some of the industries would be less able than others to keep the benefits to themselves.

Mr. Theodore W. Robinson, vice-president of the Illinois Steel Company, stated that between 1899 and 1926 the productivity per man-hour of the several departments of the Illinois Steel Company increased as follows:

	Per Cent
Ore unloading.....	706.7
Blast furnaces.....	277.3
Bessemer ingots.....	99.8
Open-hearth ingots.....	66.0
Rail mill.....	120.1

Since these gains in efficiency were due for the most part to improvements in equipment and technical methods, it would be unfair to the workers in these departments to base their pay upon these varying results. It would be absurd to claim that wages in the ore-unloading department should be increased seven times as much as wages in the Bessemer ingot department, and equally unreasonable to claim that all of such gains in the steel industry should be confined within the steel industry.

There would be no justification for a claim on behalf of the farmers that the benefits of all labor-saving machinery for agricultural production should be confined to them, and it is obvious that such a claim could not possibly be enforced. On the other hand, the farmers have a fair claim to a share in the benefits of improvement in the other industries.

### *Union Wage Practice*

As we have seen, the American Federation of Labor has not recognized the economic law that individual productive ability is recognized in individual reward. On the contrary, it foolishly attempts to prevent the operation of this law, never having directly or impliedly repudiated its 1919 declaration that "the system of putting artisans upon a piece basis is most objectionable in private industry," and that workers should receive a "fixed price for certain hours of work."

At its 1930 convention the American Federation of Labor Convention instructed Federation officials to protest to President Hoover against orders providing for classification of navy-yard workers according to ability, each grade to receive a separate rate. As President Franklin of the Shipbuilders Union declared, "For many years an insistent fight has been made on the part of all organizations whose men are employed in the navy yards to eliminate the second and third class classifications among the mechanics, and very largely that has been done. . . . The intermediate and the minimum wage have practically been abolished." He declared that classification is opposed since such classi-

*Efforts of unions to maintain equal rates of pay for all skilled workers in a craft or industry and to give skilled workers work at maximum pay which can*

*be done as well by the less skilled violate sound economics.*

*Wage increases secured by monopolistic advantages are at the expense of other workers and the general public.*

*They may also result in lower actual earnings for the monopolists, through loss or irregularity of employment, as in the building trades and coal industry.*

fication would show "there is work which can be properly performed by employees in the intermediate and minimum rates of pay"—in other words, of lesser skill and worth. The American Federation of Labor action was a demand (1) that skilled workers shall be considered as of equal skill and entitled to equal rate; (2) that men receiving the wages of the most skilled workers shall perform work which can be done as well by men of lesser skill receiving lower rates of pay.

Such a policy is not sound economics!

Where union activities do apparently raise wage rates, it is well to consider that such increases are often, as Prof. Paul Douglas of Chicago declares, "all too frequently . . . because of monopolistic advantages" (*Journal of Political Economy*, February 1928, p. 172). The results, naturally, are "all too frequently" secured at the expense of workers who would like to learn that particular trade but are not permitted to do so, of workers in other industries, and of the general purchasing public.

But, pursuing the matter further, we find it doubtful whether the "monopolistic advantages" are invariably beneficial to the monopolists. Thus, union building-trade workers and soft-coal miners in the twenties were shown as receiving higher wage rates than independent workers but lower *actual earnings*, due to fewer opportunities to obtain employment (see evidence cited in 1928 report of N.A.M. open shop committee). Dr. Henry R. Seager in his 1922 presidential address before the American Economic Association appropriately declared (*American Economic Review*, March 1923, p. 7): "Wage earners in the building trades pay collectively in unemployment and irregular employment a high price for any benefits the restrictive policies of their craft unions may seem to yield."

#### EMPLOYERS' WAGE THEORY AND PRACTICE

*Employers' theory of wages, in so far as they have one, is that the*

Although the American Federation of Labor has primarily opportunistic approach to the wage problem yet its several statements on wages do comprise some sort of wage theory. On the employers' side there is no well articulated theory on wages. The employers' theory must



to a very large extent be deduced from the employers' practice.

As far as employers' wage theory does exist, it may be said to rest on these two ideas:

- a. The unit labor cost is much more important than the wage rate.
- b. Wherever possible, wages paid should be proportioned to the value of the work performed, and not to the amount of time used in its production.

The theory of employers, in short, favors payment of wages on results wherever practicable. This theory recognizes that, as one union leader declared, "on time-work, in some industries, they become clock watchers rather than workmen" (John W. Curley, President of the Wire Weavers Protective Association of the American Federation of Labor, before Ways and Means Committee of U. S. House of Representatives, Jan. 15, 1929, p. 1439).

### *Employers' Wage Practice*

Wage payments in any particular factory are governed largely by one or more of three very practical considerations—and without reference to (and often knowledge of) abstract "laws" of wages, although they tend to conform closely to the general laws of wages. These considerations are:

- (1) that payment of the going or market rate is necessary to secure and retain workers;
- (2) that payment of more than the going rate may secure a greater interest and provide incentive to increased production;
- (3) that payment of additional amounts is justified for special reasons, as, for example, variations in cost of living (especially where employees are transferred to other locations), length of service, or business profits.

All employers are governed in practice by the first of the above three considerations; some, in addition, also accept the second or third as desirable practice; and some accept all three considerations. The second and third are subsequently treated in further detail.

*unit labor cost is more important than the wage rate, and that wages should be paid in proportion to the value of work performed rather than to hours worked.*

*In practice, employers pay wages according to one or more of these methods:*

*(1) The market rate—enough to secure and obtain workers*

*(2) A somewhat higher rate as incentive to increased production*

*(3) Special additions to meet variations in cost of*

*living, to recognize length of service, or to share profits*

There are, of necessity, a great many different methods in use for determining the individual output or that of a group of workers where it is impossible or extremely difficult to measure individual efficiency. There are, likewise, many different ways in which workers are paid for their results.

*Prevalence of Payment by Time and Payment by Results*

In Great Britain, to a considerable extent dominated industrially by trade unionism, 64 per cent of 1,884,400 work people in manufacturing establishments were paid on time rates of wages, and 36 per cent at piecework rates or other systems of payment by results, according to a study of "Earnings and Hours of Labor," made in 1906 by the Board of Trade. In certain industries, according to the Royal Committee on Industry and Trade (1926 *Survey of Industrial Relations*, p. 107), the proportion of workers receiving payment by results was probably somewhat higher in 1926 than in 1906, although no statistics were collected. English employers, however, very frequently complain that even where the union in theory allows piece rates, the earnings of piece-rate workers are held in practice to a pretty uniform level, which would reduce the proportion actually allowed to work freely on piece rates. In the United States, there is a similar tendency. Thus the *United Mine Workers Journal* states that "trade unions often put a limit to piecework so that work may be equalized" (May 15, 1926, p. 15).

*Foreign observers of American industry before 1929 noted the prevalence of "payment by result."*

We have seen that in the United States the trade unions, as a general principle, oppose payment by results. The general practice of industrial plants in the United States prior to the 1929 depression was described as follows by the British Industrial Commission which studied American conditions in 1926 (*Report of the Delegation*, p. 34): "Payment by result is in operation wherever possible. . . . The amount that the piece price should yield in weekly wages is usually related to and in excess of the current time rate." The Australian Industrial Commission which in 1927 investigated American conditions declares (*Report of the Delegation*, p. 39): "In a large majority of cases the pay is commensurate with the output by means of either

cework or task system or time allowance. . . . Earn-  
ings under these systems averaged about 20% over day-  
work rates."

The Industrial Relations Department of the National  
Association of Manufacturers in 1928 made the most  
extensive American study on this subject. Reports from  
27 manufacturing plants, with 1,000,434 employees,  
showed that 50.3 per cent were paid on some incentive  
basis, and 49.7 per cent received only straight-time wages.  
The detailed figures are shown in Table 3.

TABLE 3

Group	Companies	Number of employees	Number on straight time	Per cent paid	
				Straight time	Incentive basis
Automobiles.....	15	256,936	138,047	53.7	46.3
Accessories.....	31	21,296	7,458	35.0	65.0
Building supplies.....	30	9,410	4,425	47.0	53.0
Cement.....	10	6,961	5,271	75.7	24.3
Chemicals.....	28	5,087	3,481	68.3	31.7
Clothing.....	25	13,538	4,060	29.9	70.1
Electrical.....	38	103,353	64,569	62.4	37.6
Food products and foodstuffs.....	18	16,583	11,405	68.7	31.3
Furniture.....	27	6,317	2,879	45.4	54.6
Hardware, crockery, and porcelain.....	12	9,084	5,202	59.3	40.7
Machinery and tools.....	44	16,642	9,209	55.3	44.7
Iron and steel.....	107	121,472	66,274	54.5	45.5
Lumber.....	11	5,938	1,943	32.7	67.3
Paints.....	12	10,136	2,692	26.5	73.5
Paper.....	22	7,738	2,971	38.3	61.7
Printing.....	121	62,785	31,653	50.0	50.0
Textiles.....	34	13,652	6,994	51.2	48.8
Gas, oils, and var- nishes.....	17	5,870	4,385	74.7	25.3
Grain and pulp.....	31	12,073	4,763	39.4	60.6
Gum.....	8	35,371	6,122	17.5	82.5
Stationery and printing	36	8,373	3,422	40.8	59.2
Telephones.....	97	63,035	21,674	34.3	65.7
Miscellaneous and un- classified.....	353	188,784	88,412	46.8	53.2
Totals.....	1,129	1,000,434	497,302	49.7	50.3

*An N.A.M.  
study (1928)  
of 1,127  
manufactur-  
ing plants with  
over a million  
employees  
showed 50.3  
per cent of  
them paid on  
some incentive  
basis rather  
than on a  
"straight  
time" basis.*

The number of industries covered is so large that the  
proportion of total American establishments in each group  
included in this study must be relatively small, thus raising



*The Conference Board in 1940 reported that 75 per cent of 900 companies used some form of incentive pay, and that in 313 companies 61 per cent of the workers were paid on an incentive basis.*

*Another N.A.M. survey (1937) covering 5,327 companies showed minimum hiring wage rate for unskilled labor higher as companies increased in size, and 88 per cent of over 2 million unskilled workers received more than minimum rate.*

*Extra compensation is*

a question whether the percentage figure for each group can be considered reliable for the entire industry. There can, however, be little question that the group figures are very significant. A report issued early in 1940 by the National Industrial Conference Board covering 900 companies showed that 75 per cent used some form of incentive wage pay, in 313 companies using incentive plans 61.6 per cent of the workers were paid on an incentive basis.

Surveys indicate that the percentage of manufacturing employees who can be paid satisfactorily by some incentive plan is between 70 and 80; the Western Electric Company has long had 85 per cent of its direct workers paid on an incentive basis. It is to be noted that in this case the use of an incentive basis is associated with a policy of never reducing established piece rates for unchanged jobs. (For a discussion of the theory and wartime use of incentive pay see pp. 164-165).

#### *Size of Companies*

It is interesting to note that as companies increase in size their wage payment per worker tends to be higher. According to a survey by the N.A.M. covering 5,327 companies as of Dec. 31, 1937, the minimum hiring rates per hour for unskilled labor were as shown in Table 4.

TABLE 4

Employees per Plant	Minimum Hiring Rate, Cents
1- 24	43.1
25- '49	42.9
50- 99	42.3
100- 249	43.1
250- 499	45.8
500- 999	47.8
1,000-4,999	47.0
5,000 and over	47.1

Of over 2,000,000 unskilled factory workers employed by the companies 88.2 per cent received more than the minimum hiring rate paid by their employers.

#### *Plans of Extra Compensation*

Within the past two decades many industrial concerns have installed various plans of extra compensation

employees. Such plans go further than those based upon quantitative output of the worker; they recognize as deserving of paid recognition other factors such as length of service, punctuality, attendance, and quality of work. Such supplemental bonuses are not substituted for the regular wage, either time or result, but are an increment to it.

Other sources of financial income to employees which must be taken into consideration are forms of profit sharing, stock subscription under favorable terms at lower than market prices, company pensions, and various forms of insurance provided by concerns and covering such matters as health, accident, and life. Other companies further benefit employees by such means as purchasing plans, provision of low-price housing, lunchrooms serving meals at low cost, or medical and dental care free or at cost.

*paid by many companies for length of service, regularity, quality of work, etc.; and other substantial forms of compensation include profit sharing, pensions, insurance, and medical care.*

### *Wage Flexibility*

Is it advisable to try to stabilize production and employment—to lessen the peaks and valleys of industrial employment? Assuming that we all answer in the affirmative—then will the unions' wage theory or that of the employers contribute more to the desired result?

Under which theory is it more easily possible to adjust wages to changed conditions so as to provide the least possible dislocation of productive processes—secure the maximum total amount of consumer well-being when business is good and the least amount of discomfort and unemployment when business becomes less profitable?

As to the effect of inflexible wage rates and demands upon the total volume of unemployment, we find Prof. Henry Clay, English economic authority, declaring (*London Morning Post*, Aug. 3, 1929):

If a union—or a Trade Board or Arbitration Authority—fixes wage rates in an industry at a level which makes it impossible for the industry to employ all the work people seeking to work, and maintains rates at that level, it will immediately restrict employment, and ultimately may so discourage entry to the industry that the number of work people dependent on the industry is no greater than can be employed at the rates set.

*Union wage practice of inflexible wage rates is less advantageous to labor than is flexibility preferred by employers.*

It cannot, of course, be assumed that more observance

of the employers' wage theory will prevent or cure depression and unemployment—there are altogether too many factors involved—but the following conclusion may be stated:

1. Union wage practice, insisting on inflexible wage rates and refusing to make adjustments voluntarily, downward when necessary, in times of depression delays the period when unemployed labor can be reabsorbed into industry.

2. If the greatest employment for the greatest number is the end desired, then the employers' wage theory and practice is theoretically much more sound and in practice much more efficacious.

### COLLECTIVE BARGAINING AND WAGES

*Collective bargaining is claimed to be needed to give employees equality with employers in wage contracting.*

It has been the belief of many economists, as well as the continual contention of union spokesmen, that collective bargaining (a term originated by Mrs. Sidney Webb in her 1891 book on the cooperative movement) by organized groups increases wage rates and earnings. Typical examples of such reasoning follow:

The worker is entitled to competitive equality with his employer in wage contracting. . . . Collective bargaining is thus an economic necessity and trade unionism is the instrumentality by which it is exercised [Hollander, *Economic Liberalism*, 1925, p. 107].

Collective bargaining really puts the workers on a footing of equality with employers in regard to terms of employment [Hollander, *Trade Unionism*, 1928 ed., p. 263].

The underlying economic assumptions of this "equality" argument are thus analyzed by Prof. W. H. Hutt of the University of Cape Town (*The Theory of Collective Bargaining*, P. S. King and Son, 1930):

*This argument is questioned on grounds of employers' dependence on operation of machines, customers'*

Many of the economists who condemned the exploitation theory put forward, nevertheless, the rather milder theory of "the employer's advantage"; and it appears as if they were not uninfluenced by it. . . . It is surprising that the idea obtained such a wide acceptance. Appeal to facts could have given little support to it. . . . In the words of another critic [T. S. Cree, *Criticism of the Theory of Trade Unionism*, 1891, p. 20]: "The laborer . . . is at no disadvantage in bargaining with the employer, who is tied to his machines which he must keep fully employed, or perish financially." . . . The phrase "employer's



employed" is in itself greatly misleading, for the ultimate employers of labor are the consumers, and it is on their demand that the workers are dependent [pp. 35, 36, 40].

The "exploitation" theory is also subsequently considered in this section on Bargaining Relationship.

The assumption that the alleged inequality is a modern phenomenon, due to large-scale production, is well answered in the following analysis:

Large-scale production . . . does not lower wages but raises them, both money wages and real wages. . . . Neither is it true that large size gives an employer an advantage in obtaining employees. . . . Large employers will usually be found paying just a little higher wages than the small ones. The large employer must have men whole-time and he has not the time necessary to shop around in order to hire men a little below the market. Only a small employer can do that. Only a limited number of men can be found whose necessities or disabilities compel them to accept less than the fair market rate of wages. The real effect on the wage market of large-scale employment is to stabilize it, to broaden the market, to produce uniformity, to eliminate inequalities, and to assist the spread of wage knowledge [Cox, *Economic Basis of Fair Wages*, 1926, pp. 95, 96].

The immediately following discussion does not concern the merits or demerits of collective bargaining, although either the trade-unions or employee representation systems, as a factor in

- 1) affecting conditions of employment;
- 2) affecting hours of labor;
- 3) increasing understanding, with consequent improved cooperation, between management and workers;
- 4) increasing the ease with which management can determine wage and related problems;
- 5) increasing the mental comfort and satisfaction of the workers.

We consider in this section only the question whether collective bargaining can be demonstrated, from either wage history or economic theory, to affect national wage rates and earnings beneficially.

#### The Theory

The Labor Bureau some years ago sent questions to economists concerning alleged disparity of bargain-

*dominance as real employers, and inability of large-scale employers to "shop around" for labor.*

*Economists are divided on*

*the question whether operation of demand and supply in an open market would secure wageworkers "their full share of their product."*

ing power and received answers from 20. (Union argument in Interborough Rapid Transit Company case, Vol. 2, pp. 1104-1108.) All the economists from whom answers were received are men of repute, but it is not unusual to assume that the Labor Bureau, in endeavoring to secure data for the union argument in the injunction application case, may, perhaps unconsciously, have sent its questions mainly to those known to be inclined toward the labor union theory. From the 15 definitely replying to the question, "Would the operation of demand and supply in an open market be sufficient, under modern conditions, to secure to the wage-worker his full share of the product?" the answers were divided as follows:

*Yes*—E. L. Bogart (Illinois); T. N. Carver (Harvard); Irving Fisher (Yale); J. E. LeRossignol (Nebraska)

*Qualified Yes*—E. R. A. Seligman (Columbia)

*No*—T. S. Adams (Yale); J. M. Clark (Chicago); E. E. Day (Harvard); C. W. Doten (Harvard); E. W. Kemmerer (Princeton); H. A. Millis (Chicago); E. A. Ross (Wisconsin); J. A. R. (Catholic University); H. R. Seager (Columbia); A. A. Young (Harvard)

Answering the question, "Can the wageworkers be more certain of securing their full share of the product by the use of collective bargaining than without it?" replied "Yes," with the following exceptions:

T. N. Carver (Harvard), "No; though some of them might for a time get more than their share of the product."

Irving Fisher (Yale), "Yes, provided collective bargaining doesn't entail strikes which stop production."

J. E. LeRossignol (Nebraska), "Yes, provided the unions work together with the employers to secure increased production."

It will be recognized that these qualifications are of first importance in determining the answer to

question. It is further observed that academic economists are not a unit in supporting the traditional trade-union contentions and that the dissenting minority includes some exceptionally keen analysts. It will be observed that the question of what is the laborer's "full share of the products" was not defined; only four of the eminent economists to whom the questions were sent commented on this important omission (Ira B. Cross of California; W. Taussig of Harvard; E. E. Day of Harvard; H. A. Lis of Chicago).

We must not omit reference to the theory of J. W. Rowe (*Wages in Practice and Theory*) that trade-union collective bargaining may increase wages by increasing wage productivity. This increase, it is alleged, will result from the fact that trade-union insistence on higher wages will necessarily stimulate management to the discovery of increasing use of technical changes. But, unfortunately for the theory, Mr. Rowe's studies, covering 45 years of collective bargaining, yield no evidence in support, but rather indicate that union wage-bargaining pressure has substantial influence on labor productivity. We might, on an alternative theory, suggest that competition between all producers naturally results in such keen efforts for technical and other improvements that further similar efforts due to higher union wages are impossible. Or, as William Beveridge observes (*Unemployment*, p. 368):

*The claim that union wage pressure stimulates technical improvements and productivity is countered by argument that it may cause diversion of investment instead.*

The capitalist, in place of yielding obediently to Mr. Rowe's stimulus to greater exertions . . . may simply invest in some other country where his share of the product remains greater. . . . Even if opportunity for lending were cut off, it is not clear that reducing capitalist's share of the product would have the effect contemplated by those who recommend it; in place of submitting to the intolerable of thinking harder, as required by Mr. Rowe . . . the capitalist might save less; collectively, capitalists might save too little to allow the existing standard of production of the population to continue, which, obviously, would result in lowered living standards. The effort to compel higher wages and living standards by collective bargaining, to redistribute wealth by this weapon, may actually have a disastrous boomerang effect.

Another possible effect of Mr. Rowe's theory is thus expressed (Prof. Henry Clay, *London Morning Post*, Aug. 1939): "In so far as the extension of collective bar-



gaining does stimulate or compel economy in labor . . . may maintain wages at the expense of increasing unemployment."

### *When Labor Is Partly Organized*

*When labor is partly organized, as now in many trades, strongly organized groups may for a time raise their own wage rates above normal level.*

Can collective bargaining through trade unions raise the national wage level when workers are but partly organized? We shall assume, as is the case in the more important industrial countries, that the degree of unionization varies from nearly 100 per cent in some trades to practically zero in others.

In the first place, it may be admitted that strongly organized groups can for a longer or shorter time raise the wage rates of their members above the amount they would receive under a condition of individual bargaining. As we shall later observe, these increases, however, may result in increased production costs, restricted markets for products, resultant unemployment, and less actual earnings than may be received by unorganized workers in the same industry.

But even on the assumption that the group can maintain its higher wage level for long periods, perhaps even indefinitely, it does not follow that the increases are beneficial either to society or to industrial workers as a whole.

1. Such wage increases will, other factors remaining constant, increase production costs and the price charged to consumers, including, of course, other wage groups.

*But this raise, even if maintained, is at the expense of the consuming public, including unorganized workers.*

When the unorganized laborers constitute the main body of consumers for the products of organized labor (and this unquestionably is in large measure the case), any increase in wages that can be secured through organization by a portion of the workers must, in part, be subtracted from the "real" incomes of unorganized labor. The employer is middleman, not to a great degree the ultimate consumer of labor. Some part, it is true, of the higher wage might be taken from profits or from wealth-incomes, but this would still leave unorganized workers the losers. . . . If the unions force a wage higher than a fair and open market affords this is rarely done at the expense of the employer; in the long run it is at the expense of the purchasing public itself, including the unprivileged workmen [Fetter, *Modern Economic Problems*, Vol. 2, pp. 307, 308, 312; cf. Sir Josiah Stamp, *Sidney Ball Lectures*, 1926, p. 24].

Gain at the expense of others may be a social loss and a disadvantage to workers as a body and to the national wage level. If prices cannot be increased, then profit margins fall. Production activity then decreases, partly as a result of a decreased rate of embarkation on new enterprises and expansion of old, partly as a result of increased rate of abandonment of ventures (loss of capital as distinguished from mere noninvestment of capital), and partly as a result of lowered maintenance of existing plants. In any event, such arbitrary increases, through affecting prices, will tend to disturb the flow of trade and increase the instability of employment. That is, they lower the industrial system's efficiency.

Concerning the "instability of employment," a former president of the American Economic Association observes:

Trade unions have probably erred more often by failing to consider the effect of wage increases upon employment than by failing to demand as much as union employers could easily pay. Not stronger pressure for higher wages, but more systematic effort to discover relative costs in union and nonunion plants and to estimate the probable consequences of given wage advances, is the change most urgently needed in wage policy. . . . The obstacles to broad cooperation between managements and unions are bound to be formidable as long as wages and working conditions are determined by bargaining power [Lichter, *American Economic Review*, June 1929, pp. 302, 303].

2. Not only are the costs and prices of the article or service directly involved increased by an abnormal wage rate so obtained, but so are the production costs and prices of all articles into which the product of this particular group enters. This, naturally, tends further to disturb the flow of trade, with the evils resulting from such disturbance.

3. It is, moreover, necessary to know the economic means by which wage increases may be secured and retained by organized groups. A practical monopoly of labor supply may be secured and maintained by any or several of the following means:

- a) Unreasonable length of apprenticeship terms or conditions of entrance
- b) Arbitrary refusal to admit new members
- c) Excessive initiation fees

*Or else it slackens productive expansion and venture and reduces stability of employment.*

*An abnormal wage rate so obtained affects costs and prices of other products also, so disturbing the flow of trade.*

*Use of monopolistic labor power for raising wages results in lower wages for excluded workers and higher prices for consumers.*

Assuming that the debarred workers are better qualified for the particular industry than for any other, the results will be

- (a) Higher wages for the members of the monopoly
- (b) Lower wages for the debarred workers when employed elsewhere
- (c) Higher prices to the consumers

Dr. Fetter observes that monopoly tactics secure "the most striking cases of high wage for organized workers" (*Modern Economic Problems*, Vol. 2, p. 309).

And Hobson observes (*Rationalization and Employment*, p. 30):

There is often discovered a deficiency of trained skilled workers for new or rapidly advancing trades. Professional or trade-union policy is often responsible in part for such a deficiency, for restriction means a temporary gain for the qualified few at the cost of trade development and society at large, including, of course, such wage-earners as are outside the union ranks.

Prof. Carver states (*Essays in Social Justice*, p. 138),

Limiting employment to union men and resorting to the primitive law of the club to effect their ends, they may succeed in maintaining a standard of wages in a few chosen occupations which would otherwise be impossible. . . . The non-union man . . . is sacrificed in order that a favored number may maintain a standard of life.

What would happen if the monopolistic organizations were to relinquish their artificial wage advantage?

*Disuse of monopolistic power for artificial wage advantage would increase demand for product; bring steadier employment to all groups; and improve wage and price levels and*

1. Their wages would be lowered.
2. Prices of the particular commodities would be lessened. But the price decline would not result in falling profit, since it would be offset by increased effective demand from those formerly deterred or prevented from buying because of the then higher prices. This increased demand would be for the commodities directly involved and for all those into which they entered as parts.
3. The groups directly affected would find their lowered wages offset by steadier employment.
4. As other groups increased purchases of products made by the formerly privileged groups, wages of the latter would be increased. Even if the increase due to it



ector was not as great as the prior decrease, we should  
ill have to consider the lowered prices they paid with  
her consumers.

5. Or (and perhaps coincidentally) the increased  
urchasing power created by the lowered prices might be  
ransferred to other commodities, with resultant wage and  
rice increases and increases in employment opportunity.

6. Wage and price levels for all industrial groups  
ould be better related and stabilized, with less economic  
iction and waste.

Collective bargaining by organized groups can, as  
e have seen, raise wage levels either permanently or tem-  
porarily for such groups. Such successes, usually more ap-  
parent than real, mislead observers who do not trace the  
ll economic effects of the wage changes upon both the  
rganized and the unorganized groups. These observers  
e the following argument to cover the discrimination  
ainst unorganized workers which improper use in col-  
lective bargaining power involves:

1. Group A is organized and has raised its wage levels  
by collective bargaining.
2. The remaining groups, B, C, and D, are unorganized  
and have lower wage levels than group A.
3. Therefore, groups B, C, and D should organize and  
will then be able to raise their wage levels through  
collective bargaining; with all groups so organized  
and acting, the national wage level will, therefore,  
be elevated.

Such reasoning omits consideration of the following  
cts:

1. The rise in group A may be at the expense of work-  
ers in groups B, C, and D, and other consumers.
2. All consumers, including members of group A, are  
benefited by the lack of price increases in the prod-  
ucts of groups B, C, and D.
3. The wage gain in group A is, as stated above, not at  
the expense of employers, but at the expense of all  
other consumers, including those of the unorganized  
and less organized groups.

*relations  
throughout  
the economy.*

*It is argued  
that special  
wage advan-  
tages obtained  
by one group  
will encourage  
others to simi-  
lar action.*

*But this argu-  
ment ignores  
that workers  
as consumers  
pay the cost of  
wage increases.*

### *When Labor Is Completely Organized*

***When labor is completely organized, what will be the effect of universal collective bargaining?***

***Suppose new supplies of labor appear.***

***Normally a cycle would begin with lower wage rates, but continue into increased production, and end with absorption of new labor supply and higher wage levels.***

***But union policies would check the cycle, continue an unabsorbed labor supply, and prevent the increase in production otherwise attainable.***

We now proceed to a consideration of the economic effects of complete unionization and universal collective wage bargaining, under two different economic conditions—assuming in each case that other factors are not changed.

1. Suppose *new supplies of labor appear in the market*. The natural results of the increased supply are in approximate succession:

- (a) Lower wage rates
- (b) Lower costs and lower prices
- (c) Increased profits
- (d) Attraction of additional capital for new and competitive firms and expansion of existing firms
- (e) Resultant beginning absorption of the additional labor supply
- (f) Increased production
- (g) Further decline in prices
- (h) Complete absorption of new supply
- (i) New stabilized wage and price levels, with the same profit margin as before.

Now under a system of complete unionization there will be resistance to the first of the above nine steps—lower wage rates. If the opposition is successful, we then have

- (a) Inability to absorb the additional supply, since there will be no inducement for capital to invest in new enterprises or to make expansions
- (b) An excess and unabsorbed labor supply
- (c) Necessary support of the excess labor in idleness (Such support may take the form of a contribution from the employed, perhaps in union unemployment insurance plans. This is a direct loss to employed labor, itself equivalent to wage reduction. If it may be provided, altogether or in part, by government dole or subsidy, derived from income or co

poration taxes. But taxation for this purpose "is made at the price of reducing the volume of savings for investment, thus in turn reducing the rate of accumulation of industrial equipment, and finally bringing about a cumulative reduction in production" (S. S. Garrett, *American Economic Review*, December 1928, p. 675). With such "reduction in production" there will naturally occur a further increase in the supply of excess labor.)

- (d) The product of industry lessened by the amount unemployed excess labor might have produced

2. *Suppose industrial processes and management methods are so improved that increasing production results.* (This analysis applies to the hypothetical case of a period of static adjustment being succeeded by a wave of progress in industrial methods.) The economic results in an unrestricted market will be, successively;

- (a) Overproduction
- (b) Price declines
- (c) Lessened profits
- (d) Curtailment of production (including shutdowns, failures, fewer new enterprises and expansions)
- (e) Unemployment
- (f) Falling wages  
(But the decline will not be very great and, in view of the improved production methods, not so great as the price declines; "real wages" would rise. In fact, it would be possible to have the wage level so related to the state of progress that adjustment would be automatic or so accommodated that no wage changes would be necessary. This would, however, seem to require a controlling governmental or industrial agency.)
- (g) Wages at a point which lessens production costs so that profits can be made at the lower prices
- (h) New stabilized wage and price levels  
(A new profit margin might be found necessary for equilibrium, but probably it would be the same as existed before the change.)

***Suppose industrial processes and methods are so improved as to increase production.***

***In an unrestricted market the result would temporarily be over-production, unemployment, and lower wages, but then new stabilized wage and price levels advantageous to workers and consumers.***



*Union policies, however, would require maintenance of wage levels with continuation of extensive unemployment.*

With complete unionization we shall find the first four steps accepted. (We are in this section considering collective bargaining only in relation to wages, and without reference to its attitude toward new machinery and processes or towards output restrictions.) Wage cuts will, however, be opposed. The following results occur if such opposition is successful:

- a. Industries making the improvements most rapidly may remain prosperous; but others will find profits diminishing, with resultant production declining, at least in the absence of wage cuts.
- b. Wage levels may be retained, with some of the workers permanently thrown out of employment to be supported as above indicated.
- c. Production declines until prices rise sufficiently for the profit margin to be resumed. But this has also created a new unemployment problem.

It is, of course, apparent from the analysis of these different situations that any general wage increase which complete unionization might create would result in increased prices with no real benefit at all to the wage earners. The only alternative is that wages would rise and prices remain constant. Under this condition profits would decline and industrial curtailment begin. Unemployment would result and remain until wages were restored to the market rate—that which would ensure the employment of the entire labor supply. Artificial forcing above this market rate could be successful only at the expense of permanent unemployment, with the real costs of its maintenance paid by the workers as a whole.

Collective wage bargaining, if labor is completely organized, will probably be

- (a) harmful to labor as a whole when new labor supply appears in the market;
- (b) harmful, but less so, to labor as a whole when industrial equilibrium is affected by improved methods and increased production;
- (c) beneficial to labor as a whole when consumer demand

increases faster than production, but only if wage demands are not proportionately greater than price increases.

Under complete unionization collective wage bargaining can increase the average annual real wage income of workers, either in particular industries or in industry as a whole, only by increasing the national productive output through increasing plant output, since "a permanently increasing wage can be secured only by increasing the flow of the specific products of labor" (H. L. Moore, *Laws of Wages*, p. 178).

But unfair wage returns among individual workers possessing different capabilities and achieving differing results will ensue, whether or not the total national wage payment is increased, unless collective bargaining permits and encourages individual payments in accordance with individual results. We can indeed safely assert that as a matter of psychology individual productive efficiency—and the national wage payment—will be decreased if any considerable number of individual workers realize that they are not paid according to their individual abilities. This is true whether the obstacle to such payment by result is managerial reluctance and inefficiency or restrictions imposed in some form through collective bargaining.

### *British Liberal View*

Available statistical evidence is insufficient to determine from its examination the effects of collective bargaining upon wages. The following observations of the "Liberal Industrial Inquiry" committee of the British Liberal Party are, however, of real interest. The committee included in its membership such leaders as Lloyd George, M. Keynes, Ramsey Muir, John Simon, and B. S. Rowntree. In the report (*Britain's Industrial Future*, 1928) the committee says in part:

Nobody, of course, can doubt that the steady pressure of the Trade Unions has very greatly contributed to improve the position of the workers. . . . But the improved wages have not been primarily, even mainly, due to the work of the Trade Unions. They could have achieved very little if the wealth of the nation had not been increasing; and the primary cause of the rise of wages has been an increase of

*The only way, under complete unionization, in which collective bargaining could increase average annual real wages would be by increasing national production.*

*And unfairness would ensue, even if total wages in nation should be increased, unless unions accepted individual payments according to individual performance.*

*British evidence casts doubt upon the contribution of collective bargaining to raising real wages in that country.*

efficiency in the production of wealth. This conclusion is forcibly borne out by the history of wage-movements during the last hundred years. It is unnecessary to trace the story in detail. But broadly it may be said that real wages, measured by their purchasing power, advanced steadily and rapidly during the greater part of the nineteenth century and that, in the last years of the century and during the years preceding the war, the rate of advance slowed down until it became almost stationary. In the first of these periods Trade Unionism was weak. It was not legalized until 1871, and at that time did not count more than 400,000 members. . . . In the second period, when the advance of wages was slowing down, Trade Unionism was growing very rapidly and was pursuing a belligerent policy; its membership exceeded 2,000,000 on the eve of the war. . . . The rate at which wages increased has been found to depend in prime degree upon the standard of efficiency in producing wealth, and only in the second degree upon the strength or weakness of Trade Unionism [p. 184].

## INCENTIVE PAY

The chiefly used methods of wage payments are

- (a) Straight-time (usually on an hourly basis)
- (b) Incentive (or "payment by result")

*The purpose of incentive pay is by increased reward to encourage the more capable workers to greater or better production.*

The purpose of incentive pay is to provide inequality of reward, so that those who are better able to produce (in quantity or quality of output, or both) will have continued urge to do so. It thus rests on the premise that individuals differ in their ability and accomplishment, and those who do most should receive most.

### *Equality of Reward vs. Inequality of Service*

Socialism and communism start from a different basis. They denounce the American Individual Enterprise System for its "religion of inequality" (Laski, *Facts, Reason, and Civilization*, p. 174).

*Pure socialism takes ultimate equality of income as its goal, regardless of individual differences.*

Pure socialism starts with the idea of equality of income for all as its ultimate goal. Marx declared (*Critique of the Gotha Programme*) that in its early stages inequality of income would exist in a socialist state, but that when the communist state was fully established, then, but not until then, would there be equality of reward, according to the doctrine, "From each according to his ability, each according to his needs." This same doctrine



sponsored by Norman Thomas, perennial Socialist candidate for President of the United States:

In a world where it is not possible to judge just how much anyone purchases or just what anyone needs, I am inclined to think that Mr. [George Bernard] Shaw is right in his argument that practical as well as ethical considerations point to the principle of equal recompense as the one likely to prevail in a world where a proper management of machinery and resources can bring plenty for all. . . . Equality or virtual equality of income lies at the end, not the beginning, of the road to socialization. . . . What socialism will do will be to . . . bring about equality of pay first within certain professions and trades and then between them [*America's Way Out*, pp. 147-149].

We cannot agree that "practical as well as ethical considerations" justify equality of reward. In fact, they justify unequal rewards in pay and income, since men are actually of unequal ability in physical strength and endurance, mental agility and power of comprehension, and capacity for leadership. Natural differences in ability are accentuated by differences in training and experience. As a result of these differences, the services of some individuals are in greater demand in the market place. Therefore, if compensation is determined, in consonance with the basic principles of the private enterprise system, by the free play of supply and demand, some individuals are paid at higher rates than others. The greatest differences are due to the fact that some individuals are capable of doing satisfactorily tasks which others cannot do at all or so well; other differences in compensation result from the fact that one individual can produce more units of product in a given period. Since men are not equally productive, it is both untrue and cruel to tell them that their services are equally valuable and should be equally rewarded.

It is an indication of health in the economic system when the existing differentials in compensation between different types of work are carefully scrutinized from time to time and changes made in those differentials which are found to be based merely on convention or tradition, or on conditions which no longer obtain. Any such scrutiny, however, will show substantial real differences between occupations and individuals, and the test of the market place will show that wide differences in rates of

*But both ethical and practical considerations seem to others than Socialists to justify unequal rewards, on account of natural differences as well as differences in training and experience.*

*In the market place these differences are reflected in compensation.*

compensation are inevitable as long as we continue to adhere to a free system.

Popular discussion sometimes confuses the question of unequal ability and correspondingly varied rewards with the questions of equality of rights before the law and differences in rewards based merely on birth or social standing. In our American system every individual is entitled to be treated as a separate person with certain clear-cut constitutional and legal rights, and to compete in the market place with other individuals for the appropriate reward for his productive efforts.

### *The Russian Experience*

The Soviet Russian experience is worth summarizing, since it is the first large-scale effort to put socialist principles into practice. (The following facts are taken from Bergson, *The Structure of Soviet Wages*, Harvard Economic Studies 76, 1944.)

1. A commission set up by the Communist Party congress in 1918 reiterated as follows the Marxian goal: "Aspiring to equality in reward for every kind of labor and to full communism, the Soviet power cannot regard as its task the immediate realization of this equality in the given moment when only the first steps in the transition from capitalism and communism are being taken."

2. The December 1918 labor code provided for different remuneration of different kinds of work, with the following factors taken into account: arduousness of the labor, risk, complexity, exactness, responsibility, education, and experience required. This code involved the setting of wages for both time and pieceworkers. The directive was not repealed in the 1922 labor code, although not specifically contained therein, and was again expressed in the 1931 code.

3. During the twenties, and until 1931, various "supplements" or "extras" above basic rates were paid to workers; "most important were the supplements paid to pieceworkers . . . to make the piece system more palatable to the workers." The wage-scale revision of 1931 sought to eliminate payment of "extras," but "supplements" still

*Even in the Soviet system the socialist goal, though at first accepted in theory, was never accepted fully in practice and an opposite trend was definitely taken under Stalin's guidance, to stimulate production.*

were paid thereafter, however, at least to workers in the so-called "leading professions."

4. Piecework existed, but apparently only in a relatively few instances, prior to April 1922. By March 1926, piece systems of one sort or another were applied extensively in Soviet industry."

5. In December 1926 the number of working hours remunerated at piece rates in large-scale industry (perhaps a small part of all Soviet industry) was 59 per cent of total hours worked; by 1937 the figure was 72 per cent. The total amount of large-scale industry in Russia in 1926 was only a small percentage of all industry.

6. It is worth noting that repudiation of this policy of progress toward equality (a policy endorsed by Lenin, despite Stalin's statement to the contrary) came after an effort had been made to get the first so-called "Five-year plan" working successfully. The 1920 wage plan, which had brought a trend toward equality, was reversed, under Stalin's guidance, in 1931.

7. In September 1931 an effort was made to apply progressive instead of proportional piece rates, but "it does not appear in any case that progressive piece work enjoyed for more than a brief interlude any wide application," although it was extended substantially after 1927, under the stimulus provided by the Stakhanovite movement to increase the productivity of labor.

8. The trend toward capitalist wage-payment principles has not been uniform, and perhaps not easy. In 1931, for instance, Stalin felt it necessary at a meeting of factory managers to denounce the "left" equalitarianism of "the managers and trade unionists." This was in the third year of the first five-year plan.

9. "In the years since 1931 capitalist principles of relative wages have been fastened more firmly on the Soviet economy. . . . The increase in wage differentials that has been realized on Stalin's initiative is far less spectacular than the vigor of his attack on the equalitarians would suggest."

10. Professor Bergson concludes: "There is good reason to believe that, as in capitalist economy, the use of progressive piece rates in the Soviet Union merely represents



*The Soviet system, however, involves arbitrary determining of values of labor and products, rather than free market determination.*

*Yet some economic realism is manifested.*

*In America the war showed clearly the benefits of incentive-pay methods. Such plans increased productivity by an average of 40 per cent and wages by 15 to 20 per cent, while decreasing costs by 10 to 15 per cent.*

an attempt to deal with overhead cost economies as well as physical productivity in determining wages. Extensive use of a piece system, more than any other aspect of Soviet wage administration, evidences the prevalence of capitalist wage principles in the U.S.S.R."

Two aspects seem especially worth noting:

a. The Soviet system involves arbitrary governmental determination of the values of products made instead of allowing consumers to determine what they like best and least.

b. The Soviet system has not been tried under conditions in which effort is made to develop widely increased production of consumer goods.

It is of interest to observe that a C.I.O. union delegation which visited Russia in October 1945 reported (*New York Times*, Mar. 18, 1946):

Mr. Stepanov (director of the wages department of the All-Union Central Council of Trade Unions) pointed out that because of the great and generally recognized need for increasing production, and the immediate and tangible benefits which the workers can expect from increasing the supply of commodities, the great emphasis is placed on wage incentives of all kinds to increase output.

It is unfortunate that the C.I.O. has not yet clearly promoted the same economic realism in the United States.

### *Incentive Systems and War Production*

The recent war gave full demonstration of the benefits of using incentive pay methods.

1. The Management Consultant Division of WPB says that a survey of 92 cases in Chicago shows that the use of incentive pay plans resulted in increase in production of 28 per cent above standard, increase in wages of 19 per cent, and decrease in labor costs of 11 per cent (*N.A.A.S.P. News*, May 6, 1944).

2. John W. Nickerson, Director of the WPB Management Consultant Division, states that after companies had put wage-incentive plans into use production increased in the following proportions (*Wall Street Journal*, April 15, 1944):

	Per cent		Per cent
Electronic tubes.....	63	Aircraft equipment.....	46
Aircraft parts.....	73	Machine tools.....	64
Top nuts.....	23	Die castings.....	53
Elastics.....	44	Piston rings.....	27
Steel products.....	86		

Analyzing all cases in which new wage-incentive plans have been inaugurated in a desire to increase war goods production, Mr. Nickerson says (*New York Times*, Aug. 26, 1944):

Whether by industry or by region, the results are about the same. Taking an average of all cases, we have approximately the following results: increase in productivity, over 40 per cent; increase in wages, 15 to 20 per cent; decrease in cost, 10 to 15 per cent.

3. Apparently there has been some decline in labor-union opposition to wage-incentive plans, although neither A.F.L. nor C.I.O. has specifically favored them. There is some question whether or not in the absence of WPB and other government pressure such plans would be welcomed by the labor unions.

### *Wartime Results Are Not Exceptional*

While it is impossible to generalize in regard to the probable savings from a plan which is in contemplation, there are numerous records where . . . factory costs were cut from 20% to 50% by means of the incentive operation. Wages increase as production increases, and production has been known to increase even up to 300% [Lytle, *Wage Incentive Methods*, 1942, p. 53].

Ample experience shows that a good wage-payment plan properly installed will often increase the productivity of unskilled workers 100%, machine operators 150%, all-around mechanics 200%, and in cases of the higher skilled the percentage may run as high as 300. . . . The greater the degree of skill required in doing the work, the greater the possibilities of improvement [*ibid.*, p. 54].

Comparative earnings figures in identical occupations in different industries indicate that incentive workers earn 18.2% more than the workers in companies manufacturing machinery, 12.1% more in the primary fabrication of nonferrous metals, 10.3% more in Northern cotton mills, 17.3% more in Southern cotton mills [*Monthly Labor Review*, May 1943].

Information as to prewar use of incentive-pay methods was presented earlier in this chapter [pp. 145-146].

***Before the war there were numerous instances of reduction in costs 20 to 50 per cent and increases in wages still greater, under wage-incentive plans.***

*The lesson* of reasoning and experience seems obvious: if we want an economy of abundance, instead of one of unnecessary scarcity, there should be continued extension and expansion of sound wage-incentive plans.

It has sometimes been argued that, although so-called "scientific management" with its wage-incentive plan resulted in increased production, it also enabled the employer to discharge workers.

This contention was well answered by a scientific management authority who is well known as a sympathetic friend of organized labor, Morris L. Cooke, who stated before the U.S. Industrial Relations Commission, June 22, 1914 (p. 2681 of the record): "I think it will be impossible for you to produce a single case where the introduction of scientific management has resulted in the laying off of any people."

For Americans as a whole, the only way to have increased living scales is through increased national production. Increased production in the individual company is definitely aided by well-designed and fairly administered methods of incentive pay; moreover, high-volume and low-cost production, both facilitated through the use of incentive-pay methods, promote sustained sales and production for the employer and sustained employment-security—for the employee.

## MINIMUM WAGES

*Minimum wages have come to be fixed by law in many countries, with certain exemptions.*

*Minimum wages tend to create unemployment if fixed too high;*

During the past 50 years there has been a tendency in many countries to fix minimum wages by law. It should be noted that in nearly all cases such legislation provides certain exemptions or limitations with respect to work performed by mentally or physically handicapped persons or by learners and apprentices.

If the minimum wage for the normal worker is fixed below or at the point where everyone seeking work will be employed, there is no economic effect. If the minimum is fixed at a point higher than that at which some people will be employed, then unemployment will be created.

As we have seen previously, workers do, as a whole, and in the long run, receive in compensation the value



their production. In other words, the operations of business as such do not force wage levels down to the subsistence minimum. Even if employers desired to do so—and it would be a foolish discouragement to the customers of business—they could not; neither employers nor employees can alter the laws of economics. When they attempt it they fail and usually hurt themselves more than anyone else.

In the multitude of business operations and transactions there inevitably occur some occupations or industries, or even communities, where the economic wage is considerably below that in other occupations, industries, or communities. As total production in the country increases, thus raising the average well-being, society as a whole frequently raises its own standards of what is fit and proper, and considers that a normal person should not work for less than some specific minimum; that ability to earn at least this minimum is a prerequisite of the right to be employed, and that ability and willingness to pay the minimum is a condition of the right to be an employer.

Thus society may, in its discretion, decide that people should, from the standpoint of social decency, not be employed for less than some minimum specified amount. If it does so, it must recognize its obligation to care otherwise for those submarginal workers (submarginal because of either their own lack of ability or the economic situation of the industry or industries in which employment is available) for whom employment no longer exists. Society, in other words, must choose whether to allow these individuals to continue to work at a low wage and to provide some form of supplemental compensation paid by the state or to ban them from employment and care for them on a public relief basis.

It may be pointed out that only a productive, wealthy society can afford the economic cost of minimum wage legislation. Only in such a society can the wages of workers be fixed above the point of productivity of many workers, without mass misery and starvation as a result. They will not result in such a society because total national production is so great that society as a whole is willing to use some part of the total productivity to provide total or

*fixed too low, they will have no economic effect.*

*Though workers generally receive in the long run the value of their production, lags occur in some occupations or even communities.*

*So society may fix a minimum wage, and care otherwise for submarginal workers who may thus be crowded out of employment.*

*Only a productive, wealthy society can afford the economic cost of a minimum wage above the level of*

*productivity  
of many  
workers.*

partial subsistence for workers unable to earn the minimum wage which it believes should be received by employed individuals.

## EQUAL PAY

Should people who work for the same employer and who do the same work receive the same pay? It would seem that from the standpoint of economic justice the answer would be a logical and an emphatic affirmative. Yet this question has for many years caused great discussion, particularly since it has become a part of the whole problem of "women's rights."

As far back as 1918, following a strike of London passenger transport workers who demanded equal pay for women, the British War Cabinet appointed a special committee to study the principles which should control the relationship between wages of men and women. Early in 1919 the committee recommended that women engaged on the same or similar work as men should receive equal pay for equal work, "in the sense that pay should be in proportion to efficient output."

*Equal pay for  
equal work  
is a sound  
principle.*

From the economic standpoint there can be no justification for difference of treatment in pay between employed men and women solely on the ground of sex difference. Those doing equal work should receive equal pay. In applying this policy, it is necessary to consider the methods by which "equality of work" may be measured.

*Between men  
and women in  
manufacturing,  
the principle  
should be  
applied with  
due regard to  
differences in  
servicing  
labor, in  
regularity, in  
susceptibility  
to fatigue, and*

From a practical standpoint it should be observed that in applying the "equal-pay" principle in factory work the following factors merit study:

- (1) The practical difficulties of measuring what seems to be the same work without using such techniques as job analysis and evaluation to determine whether the work is strictly comparable. Women in a factory generally require more servicing than men in the way of "setting up," lifting, and the like.
- (2) The higher rate of absenteeism among women.
- (3) The greater susceptibility of women to fatigue requiring more rest periods.

- (4) The shorter industrial life of the woman worker, requiring more training to keep the same number at work, and limiting possibilities of development. *in continuance in employment.*
- (5) Additional expense which may be involved if women are added to a pay roll; for example, the establishment of separate locker and toilet facilities, lighting of approach or escort to bus lines, etc.
- (6) The selection by management of certain types of work as preeminently well adapted to the physical limitations and the psychological attitudes of women workers. Some jobs are ordinarily performed better by men, others by women, so that in many factories and offices in peacetime it is difficult to find cases of jobs which are assigned to women and men without substantial difference in the nature of the work. The entire scheme of subdivision of labor reflects in most cases what are believed to be effective differences between men and women. Under the circumstances, any inquiry on the general subject should go beyond a comparison of work actually done by men and women respectively, to the reasons which lie back of the lay-out of jobs. The shortage of men for civilian production during the war emergency compelled the use of women in many lines formerly limited to men, and it is safe to say that the old patterns of job assignments will be revised in the light of this experience. *Management should adapt assignment of work to physical limitations and mental attitudes as between men and women.*

#### IV. SPECIFIC ASPECTS OF EMPLOYMENT RELATIONS

In Sections IV and V, we consider various specific problems in the field of employment relations: in Sec. IV, some older problems of continuing importance; in Sec. V, some problems arising as a result of the war or assuming large postwar importance.

##### NATURE AND EFFECTS OF INDUSTRIAL WORK

Is industrial work per se more harmful than other forms of town life? Did the Industrial Revolution and

*Did the Industrial*



***Revolution and the factory system promote the welfare of the masses of the people or bring them increasing misery?***

the rise of the factory system bring increasing misery to the masses of the people? Such has been the plaint of the sentimental lover of the past, drawing his theme from the beauties of Thomson's "Seasons," and the poems of Cowper and Wordsworth. A different view has more recently been expressed by the poet laureate of England, John Masefield. In his book *In the Mill* (1941), he gives the story of his experience as a worker in a Yonkers, N.Y., carpet mill in the late 1890s:

A few winters ago, I revisited the mill. . . . I have nothing but gratitude towards the mill; it gave me a square deal, with ample pay for a good day's work. . . . In the twenty-two months of my time there, I heard no complaint, and no growl from any day-worker [pp. 132, 133, 134].

***The socialist argument, following Marx, is that modern industry "destroys the health of the town laborer and the intellectual life of the rural laborer."***

The Socialists, however, following the argument made by Marx, predicted that the Industrial Revolution meant only increasing misery for the workers. The Communist Manifesto specifically stated that the modern laborer, "instead of rising with the progress of industry sinks deeper and deeper below the conditions of existence of his own class." This prediction has no historical confirmation. It is thoroughly disproved in our discussion of Chap. XVIII. But Socialists of all sorts seem to accept this statement by Marx (*Capital*, Vol. I, Chap. 15, s. 10) that "modern industry . . . destroys at the same time the health of the town laborer and the intellectual life of the rural laborer."

### *Industrial Revolution Not Harmful to People's Health*

It is not true that the Industrial Revolution, by forcing people into factories or towns, has impaired either the general health or the health of industrial workers. The following facts, derived, except where noted, from M. Buer's *Health, Wealth, and Population in the Early Days of the Industrial Revolution* (Routledge, London, 1926), possess great significance:

1. The English population increased one fifth between 1700-1750 and one half in 1750-1800 (p. 23). The greater rate of increase in 1750-1800 was not due to any change in the marriage or the fertility rate (p. 25), nor was it due

to any increase in the birth rate, which actually declined between 1780 and 1825 (pp. 24-27).

2. There is no evidence to prove that the growth of towns led to increased natality, per se, the occasionally high rates in industrial towns being accounted for by the influx of young adults (p. 26).

3. The population increase was due to a remarkable fall in the death rate and a decreased infant mortality (pp. 29-32). Although the mortality rate began to decline before the Industrial Revolution started, yet the decline was greatest afterward. The proportion of those dying in London before five years of age was (p. 30):

	Per Cent
1730-1749	74.5
1750-1769	63.0
1770-1789	51.5
1790-1809	41.3
1810-1829	31.8

*In England the great increase in population 1750-1800 was due to a remarkable fall in the death rate, including infant mortality.*

The decline before 1810 was due chiefly to better living conditions and improvement in infant nurture; after that date vaccination was an important additional factor (p. 32; cf. Clapham, *Economic History of Modern Britain*, p. 54). A factor of extreme importance before 1810 was the establishment of "lying-in" hospitals in English towns after 1757, which considerably reduced both maternal and infant mortality (Buer, pp. 144, 145). Indeed, "relative to its knowledge, the end of the 18th century has a better record in this vital matter of maternal well-being than the end of the 19th or even the beginning of the 20th century" (p. 148). Between 1700 and 1799 the annual number of London deaths due to rickets declined from 393 to 7 (p. 153).

4. The well-to-do city dwellers, before 1750, never suffered so severely from scourges and diseases as did the poorer classes—the "industrial workers" of the era (p. 42).

5. In 1750, before the start of the Industrial Revolution, which may be placed at about 1760, the country death rate in England was 30 per 1,000, while in London it was 50 per 1,000 (p. 29). The town disadvantage in this respect which now exists existed to an even greater

*The town death rate continued higher than the rural rate,*

*but both were lowered substantially in the last half of the eighteenth century.*

*Living conditions of industrial workers in the new factory towns were much superior to those they had formerly had in rural areas, and their incomes were better.*

*Sanitary conditions,*

extent before the Industrial Revolution. Thus we find that in 1700–1750 deaths exceeded births in the English towns, but the reverse was true in the latter half of the century (p. 34). “Even at the present day the country is more healthy than the towns and the difference was far greater 70 or 100 years ago. In the period 1813–1830 the death rate in London was 28 per 1,000, while for the whole country it was 21 per 1,000 and for the rural county of Wilts it was 17.5 per 1,000. . . . The urban population was about one-third of the total in 1831 and about one-half in 1851. In view of this increase of the urban population Farr stated that a stationary death rate argued improvement rather than retrogression in town conditions. There is a good deal to be said for the contention” (pp. 225–226).

In the previous century 1750 “marks the beginning of town improvement. Incredible as the statement may appear to many persons, the towns, particularly London were becoming more healthy in the second half of the 18th century. Streets were being widened and paved drains covered in, water supply improved, houses rebuilt with an astonishing effect upon the death rate” (p. 59). And to those who lament the relative decline of rural life after 1760 it may be pointed out that the houses of village and town artisans were much superior to those of rural workers (Clapham, *Economic History of Modern Britain* pp. 36–41). The living conditions of industrial workers in the new factory towns (as distinct from older large towns) were superior to those they formerly had in country or village. “His work in the factory or work shop was long and laborious but he had always envisaged life as consisting of long and laborious toil. It was, unlike his old work, comparatively well paid; moreover his wife and children could find paid work, too, which they had probably been unable to do in the village. The family, therefore could afford better food, more meat in particular, and better clothes” (Buer, p. 249).

6. The bad sanitary and living conditions in the early nineteenth-century towns were not the result of the Industrial Revolution and a population influx, but were “



terrible relic" of the Dark Ages (p. 76). "The streets of medieval towns were generally little more than narrow alleys, the overhanging upper stories of the houses nearly meeting, and thus effectively excluding all but a minimum of light and air. In the 17th century in Bristol, which still remained typically medieval, the average breadth of the streets was under 20 feet and only trucks and sledges were allowed for transport in the center of the town. . . . In some towns, notably London, small streams running down a central gutter served at once as sewers and as water supply. The dwelling houses of the well-to-do . . . picturesque as they appear to a modern eye, seem to have been designed to admit a minimum of light and air. The dwellings of the poor were hovels, built of unseasoned wood and with tiny windows. In the 17th century London, which before the Fire largely remained a medieval city, the poorer-class house had only a covering of weather boards, a little black pitch forming the only waterproofing, and then houses were generally built back to back. Thousands of Londoners dwelt in cellars or horrible overcrowded tenements" (p. 78).

Quoting Buer again: "A better knowledge of the period anterior to 1760 is teaching us that unemployment, low wages, and child labor were no new phenomena at that date. All these evils were likely to be worse with an out-work system than with a factory system. The factory, indeed, in the long run probably tended to mitigate these evils rather than to increase them" (pp. 58, 59). (On the greater evils of child labor under the domestic system prior to the Industrial Revolution, see Ely, *Outlines of Economics*, p. 53.) "Insanitary and overcrowded though the early factories were, yet they were probably not more so than the homes of the workers. Country workers may have possessed a rough shed at the side of the house which was used as a workshop; but the town handicraftsman and his family generally lived, worked, and slept in one room . . . true of the low-skilled worker, whose labor was earliest displaced by machinery. That the work should be carried on away from the home was an obvious advantage from the point of view of health" (Buer, p. 251).

*unemployment, wage rates, and child labor were worse before than after the introduction of the factory system.*

*Improvement with Industrial Revolution*

7. Despite the sixteenth-century ordinances relating to such matters as street cleansing and pig keeping, the seventeenth-century regulations as to public scavenger and the example of rebuilding London after the Great Fire, there is no real evidence of either sanitary deterioration or sanitary improvement in the towns before 1750 (pp. 78-81). The real improvement began in London after 1750, and in the other English towns at a rapid pace between 1785 and 1800 (pp. 83-88).

*Towns in the late eighteenth century were not clean and healthy according to modern standards, but it was then that they began to show marked improvement.*

8. "It is not being claimed that the late 18th century towns were either clean or healthy according to modern standards. Could we revisit one, we should find it dirty and insanitary and should not be surprised to learn that its death rate was, according to our standards, appalling high. But, bad as they were, they were a great improvement on the towns of earlier centuries. The paved streets and the attempts at draining had diminished, if not abolished, malaria and lessened dysentery, while the drier airier houses had decreased many other diseases. If the death rate was high, it was considerably lower than it had been fifty years earlier, for whereas normally the death rate had always largely exceeded the birth rate in towns, the birth rate at the end of the 18th century in most towns equalled or even surpassed the death rate" (pp. 88-89).

9. "It is not claimed that the new (Industrial Revolution) conditions did not cause suffering; subjective they may have caused more suffering than the earlier conditions. It is not even claimed that in some directions and for some individuals material conditions were not worsened. But it is claimed that, on balance, material conditions improved enormously for the people as a whole between 1760 and 1815" (p. 241).

*The growth of commerce and industry permitted and promoted improvement in living conditions, both*

10. The growth of commerce and industry made possible, demanded, and caused improved transport, sanitary, and other living conditions; cheaper fuel, with "better warmed houses, better cooked food, and greater cleanliness"; plentiful water supply (even though often impure); cheaper household utensils (pp. 59, 60). "The Industrial Revolution, with the attendant changes in agriculture and transport, rendered the maintenance of a rapidly growing

British population possible, without resort to the cabin-and-potato standard of life" (Clapham, *Economic History of Modern Britain*, p. 54).

11. Rural life in Britain prior to 1760 was not the idealistic thing it is often painted (*cf.* Clapham, pp. 27-54). Urbanization is no modern product; apparently the relative immigration into London was larger in the seventeenth century than in the latter part of the nineteenth century (Buer, p. 75). The betterment of agricultural conditions after 1760 was due in part to the introduction from Holland of root crops and clover, adding one third to the arable land (p. 69), and in part to the Industrial Revolution. "A new demand for agricultural products was created which stimulated agricultural improvements and the improvements in transport helped both to create and to satisfy this demand. The agriculture of the country passed rapidly from being largely communal and for subsistence to being almost entirely capitalistic and for a market" (p. 61).

### *What Is the Lesson of All This?*

1. The Industrial Revolution did not cause worse living conditions for town workers per se or as compared with rural workers, nor did it impair rural conditions.

2. On the contrary, the Industrial Revolution in part caused and in part accompanied or continued improved sanitary, health, and other living conditions in the towns and in the country districts.

3. In considering the living and working conditions existing during the first part of the Industrial Revolution, we should compare these conditions with those preceding 1760, and not with present-day standards.

### *Has Individual Physique Declined?*

There are some who admit that perhaps the death rate was higher prior to the Industrial Revolution, but assert that living adults were healthier than today—the "survivors" were the "strongest" and, therefore, it is argued, healthier, stronger, taller than the average adults of today.

The evidence disproves any such belief!

*urban and rural, and made possible the maintenance of a rapidly growing population.*

*Living and working conditions in later eighteenth century should be compared with earlier rather than modern standards.*

*Did lowered death rate mean that the more numerous surviving adults averaged physi-*



*cally inferior?  
The evidence  
shows the  
contrary.*

An examination of the bones of primitive, prehistoric, and historic man shows no trace of continuous degeneration of stature (A. Dastre, in 1904 *Smithsonian Institution Report*, pp. 517-532).

Great interest aroused at the time of the Boer War caused England to appoint in 1904 a committee on physical deterioration. After extensive investigation the committee concluded that there were not only no grounds for belief that the English population were undergoing progressive physical deterioration, but that indications existed of improvement, on the whole, over past conditions (*Lancet*, July-September 1924, pp. 390ff.).

General Crowder, analyzing the selective draft data of World War I and comparing it with the first Civil War draft, said "the figures indicate a decided improvement in national physical condition during the past two generations" (1917 Report of the Provost Marshal General, p. 44). This report was later supplemented by *Army Anthropology*, published by the U.S. Government Printing Office in 1921. This report compared the stature and weight of United States soldiers in World War I with those demobilized after the Civil War. The Industrial Revolution has not progressed far in this country prior to the Civil War. The chief findings were as follows:

1. Stature was practically the same (subject to the fact that if Southerners had been included in the 1864-1865 figures, the mean stature might have been slightly increased).
2. "In view of the tremendous immigration, amounting in some years to nearly a million persons, the physical changes of the racial constitution of our stock have been so great as to mask entirely any slight alteration that may have occurred in the physique of the stock of 50 years ago, through either improvement or deterioration of environment or economic conditions." All American comparisons must be considered with this observation in mind. English comparisons are, consequently, much more reliable as showing effects of the Industrial Revolution upon a racial stock.

3. Average weight of World War I soldiers was about 5 pounds greater than of Civil War soldiers.
4. World War I soldiers averaged  $\frac{3}{10}$  inch less in chest circumference than those of the Civil War.

The conclusion must be that so far as stature and weight go there was no great change between 1865 and 1917.

Between the two world wars, the young men of the United States gained both stature and weight. The increase in weight was in line with the increase in height, so there is no tendency toward overweight. This is shown in the following table (*Report of the Selective Service Board, Medical Statistics Bulletin, "Causes of Rejections and Incidence of Defects, Local Examinations of Selective Service"*):

Average Height of Draftees — in Inches

World War I	World War II	Increase
67.49	68.49	1.0

Average Weight of Draftees — in Pounds

141.54	152.15	10.61
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Worth recording in this connection is the following observation by Dr. Louis I. Dublin of the Metropolitan Life Insurance Company (Metropolitan "Statistical Bulletin," February 1942):

The American people can definitely be assured that the charge sometimes made, that 45% of our young men are physically unfit, is entirely unfounded. This figure, which is based on the very rigid standards of selection used while we were still at peace, is wholly misleading as an indication of the health status of our youth. The American people have been unnecessarily disturbed.

And we quote again from Buer (p. 222):

Though many factors in modern life are adverse to health, it is not doubted that at the present day there is a less proportion of serious illness and disablement than in previous ages. The legend of our healthy, vigorous ancestors has as little truth in it as the legend of the healthy Middle Ages.

### *Length of Life*

1. In the last century in England, one half of the population died by forty-five; by sixty-five in this century

*In America, comparisons of physical fitness covering over 75 years of the industrial age (1865-1942) show improvement in physical condition of the people, especially in the past 30 years.*

*In England, in the nineteenth*

century, one half of the population died by age forty-five; in the twentieth century, by age sixty-five.

In the U.S., expectation of life increased by 17 years from 1900 to 1942.

(Dr. Irving Fisher, *American Journal of Public Health*, January 1927, p. 6).

2. About one third of the persons now at age sixty-five are alive only because of the improvement in mortality since the year of their birth (Dublin and Spiegelman, *Human Biology*, December 1941, p. 446).

3. The expectation of life has greatly increased. According to Dr. Louis I. Dublin ("Possibility of Extending Human Life," *New York Times Magazine*, Nov. 1927), most of the gain has been due to improvement in the death rates under age forty-five. Dublin shows that the expectation of life at birth in Geneva in the sixteenth century was only 21 years, but in the eighteenth century it was 34 years. In Massachusetts the expectation of life at birth increased from 35 years in 1789 to 45 years in 1897.

For the entire United States, the expectation of life at birth from 1900 to 1942 has been increased by 17 years as shown in Table 5 (based on data in the Metropolitan Life Insurance Company, "Statistical Bulletin," April 1944):

TABLE 5. — EXPECTATION OF LIFE AT BIRTH

Period	Years	Period	Years
1900-1902	47.8	1929-1931	59.4
1901-1910	48.9	1930-1939	61.1
1909-1911	50.0	1939-1941	63.6
1919-1921	56.1	1942	64.8
1920-1929	57.8	Gain, 1902-1942	17.0

Improvement in mortality between 1900 and 1942 resulted in the United States in the saving of 1,071,000 lives (*ibid.*, November 1944).

4. For white males in the United States the expectancy at birth in 1942 was 63.7 years and for white females 68.6 years (Metropolitan Life Insurance Company, "Statistical Bulletin," April 1944).

5. In England and Wales, the life expectancy at birth in 1881 was 43.4 years for males and 46.6 years for females; the 1937 figures were, respectively 60.2 years and 64.4 years (*Population Index*, July 1944, p. 2).

Average length of life of industrial workers in



United Kingdom, *Statistical Abstract*, July 1940, p. 40).

6. Constant improvement in the life span of industrial workers is being made. In 1911, the average length of life of the American and Canadian industrial population was 46.6 years; 55.1 years in 1921; 57.9 years in 1931; and 63.6 years in 1943 (Metropolitan Life Insurance Company, "Statistical Bulletin," August 1944).

7. The U.S. Bureau of the Census in 1910 published life tables showing that in the main working period, ages twenty to sixty, the rural population has a decided advantage over the urban dwellers. Outdoor labor appears to be more advantageous from the standpoint of life expectation than indoor labor. To the extent, therefore, that the Industrial Revolution has drawn people from farm to factory it has tended to decrease somewhat the life expectation. It is, however, claimed by some that the better health, or at least longevity, showing of the rural communities is only apparent (*cf.* Thompson, *Urbanization*, pp. 448-55).

The following tentative conclusions and inferences are drawn from the above facts:

- a. The Industrial Revolution has not prevented, but has stimulated, in England and the United States a steady increase in the number of years expectancy of life at birth.
- b. Urban life is slightly less conducive to long life than rural life. To the extent that industrialization increases the percentage of total population dwelling in cities it is a factor to be considered. We may, however credit to increased urbanization itself some of the great interest in infant and maternity care which has greatly increased the life expectancy at birth. "The progress that has been made in both city and country in respect to the manifest improvement in health and in mortality, as well as the probable improvement in physique, is overwhelmingly the result of forces that have been set in operation in the cities and that have been carried forward by urban instrumentalities" (Thompson, *Urbanization*, p. 463).

***U.S. and Canada increased from 46.6 years in 1911 to 63.6 years in 1943.***

***Rural workers have some advantage over urban workers in life expectancy.***

***On the whole, the Industrial Revolution has not prevented, but has stimulated, a steady increase in life expectancy; and rural improvement may be credited to developments set going in cities.***

## INDUSTRIAL ACCIDENTS

For many years an employee who was injured while at work could sue the employer and recover damages if he could prove

*Employees injured at work were not for many years assured of adequate compensation, and legal procedure for that purpose was awkward.*

- (a) that he had not himself been responsible for the accident through "contributory negligence";
- (b) that the accident was not an "ordinary assumption of risk" accompanying the particular type of work;
- (c) that a "fellow-employee" had not been responsible for the accident.

The necessity of showing these things resulted in uncertainty concerning how much compensation, if any, an injured employee might receive; it resulted in great differences between amounts awarded by different juries in different places for virtually the same accident. This was all unnecessarily hard on the employee; in addition, both the employer and the employee were often victimized by lawyers who worked for a part of the judgment, and the employer was subject to great uncertainty as to the costs of industrial accidents.

*The N.A.M. sponsored an adequate compensation system, now in operation.*

The modern concept of workmen's compensation for industrial accidents (and in certain cases for industrial diseases) was then advanced, under which there is an unqualified right to compensation. The scale of payment for specified accidents is specified in the law, instead of being left to the chance of legal suit. In the United States the National Association of Manufacturers was one of the early sponsors of workmen's compensation legislation, and advocated it as the exclusive procedure in the case of industrial accidents before the American Federation of Labor took such action.

*Industrial accidents have been greatly reduced in recent years, largely through efforts of employers' associations.*

There has also been a very great reduction in industrial accidents. This trend also was attributed to employee (particularly the National Association of Manufacturers, the National Metal Trades Association, and the National Founders Association) by the U.S. Industrial Relations Commission which reported in 1915.

The results of the safety movement are impressive. Organized safety work started in 1913; excluding moto

vehicle accidents, the record shows that in the 30 years 1913-1943 "a total of 310,000 lives have been saved through reductions in all accidental deaths," and many millions of accidents avoided or minimized (*Accident Facts*, National Safety Council, 1944 ed.). As a matter of fact, in 1943 there were 1,900,000 occupational accidents, as compared with 4,850,000 occurring in homes; and of 2,200,000 accidents to workers that year 1,900,000, less than half, occurred while at work and 2,300,000 were off-the-job accidents.

Two significant trends connected with workmen's compensation may be observed:

1. A tendency to include "industrial diseases" with industrial accidents. On the face of it this seems reasonable; the difficulty arises in knowing whether a disease is really due to some particular employment or originated outside of relationship with any employment, or in employment with one or more previous employers. As a consequence there has been some tendency for one of the evils of the days before workmen's compensation to recur—efforts of some lawyers and some doctors to "trump up" padded cases to recover substantial damages, of which they would receive some proportion. Accidents are pretty generally, or at least relatively, measurable; while disease is not, as to either cause, extent, possible recurrence, or duration.

To avoid victimization and unnecessary losses, many employers have in self-defense adopted (at least in prewar days when there were more workers than jobs) rather meticulous selection of employees, perhaps even drawing the line too fine in some cases as to employment eligibility based on information as to health status.

2. Some states have adopted workmen's compensation funds—in effect setting up insurance companies run by the state. Some states have established these funds on a monopoly basis, under which private insurance companies cannot sell compensation insurance to employers in the state; in other states the state fund competes with private companies. Without arguing here the question whether a state is justified in setting up such a business enterprise, it must be stated that if it does so, it should be

*Less than half of the accidents to workers now occur at work.*

*A recent tendency to include "industrial diseases" with industrial accidents has caused an increase in "trumped-up" cases and in emphasis on health in selection of employees.*

*Some states have set up state workmen's compensation funds, either as a monopoly or in competition with private*



*insurance companies.*

on a basis which would permit competition by private companies and the state fund should be free from subsidization by money of the taxpayers.

## INDUSTRIAL HEALTH

*Efforts of employers to maintain healthful working conditions and also to provide direct health care have produced marked benefits to both employers and employees.*

*Reductions in occupational diseases and accidents, in turnover, and in compensation costs have been notable.*

Since the beginning of the twentieth century special attention has been paid by employers to the establishment and maintenance of working conditions which promote the health of employees, and employers have also undertaken direct health work in their plants, realizing that improved health of employees contributes to industrial efficiency.

The results were thus stated on May 16, 1944, by Dr. Victor G. Heiser, Medical Consultant to the National Association of Manufacturers:

The development of industrial medicine and industrial health work in industry follows the development pattern of the industrial safety movement. Larger industrial plants were quick to adopt industrial safety work, not alone because of its humanitarian aspects, but as an economically sound activity of mutual benefit to employer and employee. Industrial health and industrial medicine practices have been adopted by larger industries for the same reason, and it is a proof fact that such programs are not alone a good employee-relations activity, but an economically sound program of mutual benefit to employer and employee. A recent survey of 2,064 plants employing 1,945,551 workers showed that plants maintaining a good medical service had a reduction (since establishment of company health programs) of

- 62% in occupational disease
- 44% in accidents
- 29% in absenteeism
- 28% in compensation (insurance premium costs)
- 27% in labor turnover

An average figure of savings per employee produced by a good industrial health program saves between \$10 and \$12 per employee per year.

Improved health among industrial employees, and among the public generally with resultant benefits to community life, has resulted also from increased accessibility to medical care by means of automobiles and good roads. Dietary improvement has been promoted by competition

used on commercial motives—for example, the shipment of fresh fruits and vegetables over long areas. Teaching about diet and food preparation in the public schools has been stimulated and aided by commercial provision of a greater variety of food products and information about their use.

## PROBLEMS OF AGE AND SEX

### *Child Labor*

Before the Industrial Revolution child labor was widespread in the families of agricultural laborers and town artisans; this situation was somewhat improved but was nevertheless persistent during the early decades of the revolution. As education and skill became increasingly necessary in industry and as real wages of factory workers rose, the employment of children in manufacturing decreased rapidly, although on account of the shortage of labor there was during World War II some increase in the number of children gainfully employed.

The proportion of wage earners under sixteen years of age as a percentage of all manufacturing wage earners declined as follows:

Year	Per cent	Year	Per cent
1899	3.42	1914	1.73
1904	2.92	1919	1.33
1909	2.44	1930	0.48

It is interesting to note that this trend began many years ago. The National Child Labor Committee was organized only in 1904 and there was no federal legislation on the subject until 1916.

A survey by the National Association of Manufacturers, covering 1,572 companies employing 1,575,811 wage earners in 1929 and 1,700,644 in 1936, showed that in 1929 they had 1,724 wage earners under sixteen years of age and in 1936 only 28.

An increasing problem we now face, however, is to make provision in school programs for the requirements of industry, making easier the initiation of graduates into

*Child labor in industry has declined steadily during the past 50 years.*

*Workers under sixteen were 3.42 per cent of total factory workers in 1899, 0.48 per cent in 1930.*

*With the elimination of child labor in industry, schools should make increased provisions in*

*school programs for work requirements and prospects, fitting youth for economic usefulness.*

*As to older workers, from an economic standpoint no arbitrary discriminations in employment practices are justified.*

*The proportion of older persons in the population will increase. The employment of them involves considerations of a noneconomic character, but those who*

jobs. The schools and industry together may work out a program which will be specifically designed to relate school accomplishment to work needs, and to provide special education or special work for mentally retarded children. The basic purposes of education are to enable people to make more of their lives, with happiness and satisfaction; to be good neighbors, to be intelligent and responsible citizens. This is not at all inconsistent with a realization that the schools may also aid in fitting the individual to become an economically useful person instead of an economic misfit, who usually is or becomes also a social misfit.

### *Older Workers*

During the latter part of the twenties charges were made that industry was adopting arbitrary hiring limits which impaired the work and earnings opportunities of workers over forty, and menaced the welfare of their families. During the thirties such charges were intensified, the claim also being made that industry discharged otherwise discriminated against "workers over forty."

From an economic standpoint no arbitrary discriminations in employment practices are justified; even arbitrary discrimination that prevents or limits the employment, retention, or advancement of individuals who would increase total productive efficiency is economically unsound. As more older persons capable of production are withdrawn from it, a greater economic burden is placed on the younger groups in society.

As concerns age discriminations the following facts warrant attention:

1. As far as individuals over sixty-five are concerned, their proportion in the total population will increase until about 1980, but it is probable that as a result of the federal old-age annuity system there will be voluntary withdrawal of an increasing percentage of such individuals from the labor force. From a medical viewpoint and on the ground of contentment there is some question, according to psychotherapists, whether otherwise able people over sixty-five are not better off if gainfully employed, or unfully occupied; but this involves considerations primarily of a noneconomic character. The U.S. Social Security



t, however, tends to deprive both individuals and society of the benefits of productive work by persons who wish to work and who should be encouraged to do so; for it has subordinated other considerations to the desirability of some general provision for old-age security.

2. In 1929 28 per cent of manufacturing plants had no maximum-age hiring limit or practice, the most frequent being forty-five for unskilled and semiskilled and fifty for the skilled. Among the reasons given for such limits were physical conditions of the workers or the work, obligation to provide steady employment for individuals already in company employ many years, tendency of older workers to slow up at work, heavy cost of workmen's compensation insurance, liability of older employees to injuries, greater flexibility and adaptability of younger workers. The problem of hiring new employees over forty is entirely different from that of retaining experienced workers far beyond that age limit. The cost of training new workers who are approaching middle age, especially for skilled tasks, is of course far greater than that of training young and alert persons.

3. A 1938 survey by the National Association of Manufacturers of 2,485 companies revealed:

- a) No companies discharge workers when they reach forty. In other words, there is continued employment of most employees after they reach forty or forty-five.
- b) Less than 1 per cent of the companies laid off older workers before they laid off younger workers.
- c) Most companies (89 per cent) have no arbitrary maximum hiring age limit, although 38 per cent do give preference in hiring to workers below forty, primarily because of the training and apprenticeship requirements and because of the physical demands made by certain tasks. In other words, there is a problem for any company in hiring workers of any age, either thirty or forty, who have had no previous connection with the company. Because of the factors above mentioned, new employment may for some individuals be more difficult as age increases.

*wish to work and can do productive work should be encouraged to do so.*

*An N.A.M. survey (1938) showed that employees are not discharged on reaching forty or forty-five, but many employers give preference in hiring to workers below forty on*

*account of  
training  
requirements  
or character  
of work.*

*Labor unions'  
requirements  
of equal  
hourly wages  
injure morale  
of older  
workers of  
superior skills.*

(d) As to the work performance of employees over forty as compared with younger employees, only 16.8 per cent of the companies said they had more illness, only 13.8 per cent said the accident risk was greater, and only 16 per cent said the psychological adjustment problem was greater. Only 15.4 per cent said their efficiency was less and only 5.2 per cent said their cooperation was less.

4. Prof. Anton Carlson of the University of Chicago says (*Science News Letter*, Jan. 23, 1943) that the labor-union philosophy of equal hourly wage for all workers in a trade must share part of the blame for the discarding of older workers by management, as well as for the destruction of morale and satisfaction in working of the superior worker who is held to the level of the mediocre worker.

The foregoing facts and observations are strongly supported in a study by Otto Pollak of the University of Pennsylvania (*American Journal of Sociology*, September 1944). After surveying the statistical facts as to alleged discrimination against older workers in industry, Mr. Pollak concludes:

These measurements do not justify the popular notion of industrial scrap heap at forty or forty-five years of age. . . . Discrimination against older workers in industry, if it exists at all, is very small indeed. . . . There has been a good deal of overstatement regarding the unfavorable position of older workers, in connection with the struggle for social reform.

## BARGAINING RELATIONSHIPS

The relationship between the employer and employee is a contractual one. In the making of the contract there must be an offer of terms and an acceptance of them. The first offer may not be accepted and another may be made. This involves a process of negotiation between the employer and the prospective employee; more commonly this process is called "bargaining." The word implies a process of "horse trading," with an effort to secure an advantage based on strength or sophistry instead of an arrangement based on economic facts and mutual advantage. "Ne-

ation" is a much more accurate and desirable term, but it is not the function of this commission to revise language, and we shall, therefore, use the term "bargaining" because of its common usage.

Such bargaining may be by an individual, acting for himself or through a representative, or by a group of individuals, acting jointly or through representatives. "Collective bargaining," as the term is generally used, involves bargaining by an organized group, through representatives.

It is sometimes forgotten that "the early traditions started out with individual bargaining. The present practice of asking for a conference with representatives of employers in order to agree upon terms collectively was not thought of until later" (David J. Saposs, formerly with the National Labor Relations Board, and in 1944 chief economic advisor in the War Production Board's Office of Labor Production, in *History of Labor in the United States*, Commons and Associates, 1918, Vol. I, p. 1).

Discussing the causes for abandonment of the earlier practice, Mr. Saposs observes (*ibid.*): "It was not due, as is generally imagined, to the enormous economic power exercised by the employer, or because of his superior bargaining ability . . . [but] developed as incidental to the practice of submitting a price list to individual employers."

We have considered the "exploitation" theory, in connection with our treatment of the economic aspects of collective bargaining over wages, and in a later portion of this chapter will consider the closed shop which frequently, but not universally or necessarily, accompanies collective bargaining.

It may be noted here that in this chapter traditions are discussed with reference to the economic effect of their policies rather than in a general consideration of their over-all desirability. It is agreed that unions have other functions than serving as one of the participants in collective bargaining, but it is not appropriate for the purposes of this discussion to deal at length with these other functions or to express any opinion as to the desirability of unions as voluntary organizations. We merely

*Bargaining relationships between employers and employees were formerly on an individual basis, even in earlier stages of union organization.*

*Labor unions have other functions than collective bargaining, but only the economic effect of their bargaining is discussed here.*



note in passing that frequently local unions serve as centers of social activity for their members; that in some cases unions formulate and enforce standards of experience and craftsmanship as a qualification for membership; that they often provide death and sickness benefits to members and their dependents; and that through their meetings they often help Americanize their foreign members and contribute to a comprehension of the world they live in. In the case of national unions that employ experts, such as statisticians and actuaries, the suggestions that they bring to the collective bargaining conference are much better formulated than they would be by individuals acting alone.

### *Why Workers Join Unions*

*The chief reasons why workers join unions are*

- (1) coercion
- (2) psychological pressures
- (3) desire for betterment

In analyzing the development of unions, it may be noted that there are three chief reasons why workers join unions:

1. *Coercion.* Many workers have been coerced into joining labor organizations. Either new legislation or official action, under present laws should protect employees against coercion by either employers or workers.

2. *Psychological pressure.* This is partly a desire not to be left out in the cold when other people are joining. The herd impulse to do what others are doing may affect many but not all employees from time to time; and many who rush to join a union quit it just as easily. Of much greater psychological import is the fact that as industry became larger it became more difficult, even impossible, for employees to know their employers in many cases—for example, to know personally the president or general manager of the company. This brought about a feeling of isolation which prompted or welcomed appeals to "unity" to join with others in dealing with the unknown employer.

As industry became located to a greater extent in towns and cities, the neighborhood acquaintanceship of workers was lessened and workers responded more readily to an appeal that they could know and cooperate with their fellow workers only through a formal organization. When these natural psychological appeals to formal organization were accompanied by employers' insistence that

pure economics alone should govern employment relations and by employers' failure to train supervisors properly in dealing with workers, it is no wonder that union organization obtained increasing strength; though the unions, too, as a result of attacks on the public safety and a "public-be-damned" attitude suffered occasional setbacks. As in the seven years after World War I, an experience which may now be repeated after World War II.

3. *Desire for betterment.* When we speak of bettering the worker's lot, most of us think principally of wages and hours, and these are very important. But the smart union organizer attempts to organize workers not merely by primary emphasis on wages and hours, but by locating and promising correction of minor grievances. Inadequate supply of toilets, drafts in a workroom, lack of a parking lot, no place to smoke while waiting for a job assignment—grievances such as these the smart organizer emphasizes and promises to correct. By preliminary scouting he finds three or four minor grievances common among a group of workers and then promises to correct them by unionization. It is these festering minor grievances which often cause more labor relations trouble than the major matters, and where existing give added intensity to any dissatisfaction with wages and hours.

Additional support is given this view by a recent survey of several hundred workers in different manufacturing companies to determine why they liked to work for their companies. Each was asked to list several reasons. Their replies showed that other considerations than wages and hours rated high in importance.

#### *Right of Collective Bargaining Not at Issue*

It is not intended by any comment made herein to suggest that government should do anything to discourage the formation of unions. Any group of people has the right to organize for any purpose that the members wish to carry through and that does not injure others; and no other group in the community is entitled to try to suppress such organizations as long as they do not take illegal and coercive steps to accomplish ends which are illegal.

*Desire for betterment may include more than adjustment of wages and hours. Minor grievances may cause more discontent, or aggravate existing wage-hour dissatisfaction.*

*Government should not do anything to discourage formation of unions, but government*

***should not arbitrarily control procedures of collective bargaining.***

***Labor unions could make a constructive economic contribution if they set high standards of competency and conduct and promoted increasing output. They introduce destructive and antisocial factors when they insist on uneconomic wages, exclude competent persons from work, and advocate restriction of output.***

Another point which must be kept in mind in discussions of current collective bargaining issues is that the question of the desirability of collective bargaining is different from the question whether the government should arbitrarily control the procedures used in collective bargaining. For instance, the government might insist that an offer by either participant to continue the same rate of pay and conditions of work is not a bona fide approach to a bargain. It should be recognized that criticism of such action as an unjustified interference by government is not in any sense a criticism of the appropriateness of collective bargaining procedures. As another instance, an employer who refuses to consent to provisions for the maintenance of union membership, but is willing to negotiate matters of rates of pay and conditions of work, should not be compelled by government action to grant maintenance of membership unless Congress should pass a law requiring him to do so. His objection cannot be fairly construed as an objection to collective bargaining.

From the standpoint of economics there is nothing inherently good or inherently bad about collective bargaining per se. It is difficult to judge it in the abstract; the results in a particular case might be either good, bad, or of no significance. If collective bargaining groups as a whole laid down high standards of competency and conduct for membership and promoted increasing output, they would provide a constructive contribution to the economic welfare of the country. When they insist on uneconomic wages, exclude competent individuals from membership, prevent the hiring of competent workers, compel the discharge of competent workers, or advocate restriction of output, then their operations are uneconomic and antisocial.

The American Federation of Labor apparently believed that it possessed the only correct idea and method of collective bargaining, a concept challenged by the development of employee-representation plans in the twenties and by the industrial membership idea of the C.I.O. in the thirties.

The C.I.O. policy, as well as the employee-representation plans, repudiated (with some exceptions in ex-



se) the craft or trade organization basis of the A.F.L. the C.I.O., however, seeks to organize all the workers of whole industry, while employee-representation plans ought to organize all the employees of one company.

Under pressure from the A.F.L. the government enacted the Wagner Act, designed and administered to polish employee-representation plans. For this reason it is historically valuable to record the following appraisal of the employee-representation idea made in 1927 by Prof. W. M. Leiserson, former chairman of the National Mediation Board (*Personnel*, February 1928):

Its accomplishments are the accomplishments of organized labor. Just as some ill-informed people think there is only one form of political democracy . . . most labor leaders think trade-unions are the only proper form of labor organization. When I study employee-representation and unions both, without preconceptions, I find that sometimes the most effective kind of management-and-worker cooperation is brought about by employee representation, sometimes by trade-union cooperation with employees, and sometimes the same result is brought about in other ways. There is no one true form of industrial democracy.

The following practices in many C.I.O. and A.F.L. unions, many of which can be corrected by legislation, are unsound in principle, promote economic inefficiency, or have resulted in wide public criticism:

- (1) Failure to send out notices of meeting to all members
- (2) Arbitrary fines, suspensions, and expulsions
- (3) Important decisions made by a small minority of all members
- (4) Domination of local unions by the national headquarters of the union
- (5) Lack of secret ballot in the election of officers and calling of strikes
- (6) Failure to have elections for many years
- (7) Election to office of men with criminal records
- (8) Failure to regularly provide full and audited accounting of funds to union members

#### PROBLEMS OF PRODUCTIVE EFFICIENCY

When productive efficiency is impaired, national output is reduced, prices are raised, and the whole public

*Employee-representation plans, discouraged if not abolished under the Wagner Act, were found "sometimes the most effective kind of management-worker cooperation."*

*Unsound union practices, some of which can be corrected by legislation, include arbitrary acts by officers or minorities, failure to hold elections or to provide secret ballots, domination of locals by national heads, and inadequate accounting.*

*Impairment of production*

*efficiency  
reduces  
national out-  
put, raises  
prices, and  
affects the  
whole public.*

suffers. In this section we consider four barriers to productive efficiency which frequently occur:

Labor supply monopoly  
Output restrictions  
Seniority  
Labor disputes

*Four frequent  
barriers to  
productive  
efficiency are  
monopoly of  
labor supply,  
restrictions on  
output, the  
seniority  
controversy,  
and labor  
disputes.*

### *Labor Supply Monopoly*

The closed shop was thus defined by the *Bridgeman Magazine*, official organ of the Iron Workers Union (December 1905): "Closed shop, then, is a term for a shop, factory, store, or other industrial place where workmen cannot obtain employment without being members in good standing of the labor union of their trade."

Discussing the closed shop, Dr. Frank T. Stockton said (*The Closed Shop in American Trade Unions*, Johns Hopkins University Studies, 1911, p. 126): "The method ordinarily employed of unionizing a shop is to bring in as many of the men as possible, and then to demand of the employer that he recognize the union and agree thereafter to employ only union members."

There are many variations or modifications of the "closed shop." The most common are as follows:

*The "closed  
shop" may be  
of the "prefer-  
ential,"  
"union,"  
"check-off,"  
"maintenance-  
of-member-  
ship," or  
"union-secur-  
ity" type.*

- (1) The "preferential shop," where the employer agrees to fill all vacant positions with union workers if they are available, getting them either through a government employment office or a union hiring hall (or an employment agency run by the union for its own members)
- (2) The "union shop," where nonunionists can be employed, but must join the union within a specified period after employment
- (3) The "check-off" shop, where the employer assumes the responsibility of keeping workers in good standing in the union by deducting union dues from their pay envelope and turning them over to the union
- (4) "Maintenance-of-membership" agreement, where the employer agrees in advance to discharge an employee who is said by the union not to be in good

standing, sometimes after a short period allowed nonmembers to join

- (5) "Union security" agreement, virtually identical with the preceding

From the economic standpoint, any such policy which arbitrarily excludes from employment a worker who is not allowed to or does not choose to join or stay in a union is a restriction which tends to prevent employment, retention, and promotion of some who may be best qualified to perform a task.

It is exactly as objectionable, from an economic standpoint, as if the employer were deliberately to refuse to employ certain individuals because they belonged to a union. The latter situation is now illegal; the former is not only legal, but is promoted by the national government.

As long ago as 1890 the American Federation of Labor declared (*Convention Proceedings*, p. 42), "It is inconsistent for union men to work with nonunion men."

During World War II many unions which did not then have closed-shop contracts demanded (and the demand was generally granted by the War Labor Board) insertion in labor contracts of so-called "union security" and "maintenance-of-membership" clauses. Such clauses do not comprise a complete labor monopoly, but they are a step toward it, and tend in practice to force workers to stay in unions who would get out if they could, and to give unions continued rights to represent the employees of a company under the law after they no longer do so in fact.

Over a quarter of a century ago prominent representatives of American industry presented to Mr. Gompers and other union heads a proposal that they would make nation-wide agreements in different industries on wages, hours, and working conditions if the unions would abandon the closed-shop demand. Mr. Gompers and his associates rejected the proposal.

A monopoly of the supply of labor is as objectionable from the standpoint of economic efficiency and public welfare as any other known monopoly in manufacturing or distribution.

*Any policy arbitrarily excluding from employment a nonunion worker tends to prevent employment, retention, or promotion of workers who may be best qualified.*

*As long ago as 1890 the A.F.L. declared it to be "inconsistent for union men to work with non-union men."*



*For productive efficiency, no arbitrary discrimination in hiring, retention, or promotion should be used as between members and nonmembers of unions. The public must pay the increased cost of the closed shop.*

*The same monopoly of labor supply gives labor leaders power to dictate methods, materials, prices, and customers.*

*And the closed shop violates an important American freedom in restricting the right to work.*

In the interest of productive efficiency there should be no arbitrary discrimination in the hiring, retention or promotion of employees based upon membership or nonmembership in any lawful labor organization. Employers should be free to select, retain, and promote employees on the basis of competency and should follow this practice. Inability or refusal to do so inevitably means that less efficient labor is employed and that costs are raised. William Green, when a vice-president of the American Federation of Labor, aptly declared: "The labor cost of manufactured articles are passed on to the consumer. The public at large therefore pays the labor cost of everything manufactured."

The economic evil of the closed shop goes beyond preventing the employment, retention, or promotion of the most qualified workers. Through its monopoly of labor supply it has the power to dictate in such fields as these:

Production methods  
Materials to be used  
Prices to be charged  
To whom goods can be sold

The last two of these fields are much less frequently invaded than the first two.

Even more important, however, than the economic questions of efficiency and cost is the necessity of preserving equality of opportunity, freedom of contract, and individual liberty. These priceless heritages of Americans are menaced when the closed shop seeks a monopoly of the supply of labor, demanding that only union members should have the right to work, that the liberty of Americans to make contracts and to work, to decide for themselves whether they want to join any organization, shall be destroyed. Any such philosophy or practice is unsocial and violates every principle of individual freedom and human rights.

### *Output Restrictions*

It is probably true that most workers who do not have a special incentive to do more and better work ten

to do less than the maximum of which they are reasonably capable. Such individual acts of restriction lessen productive efficiency, but in total are probably not economically burdensome—though this is not certain, since they are not capable of measurement. But when output restriction is deliberately inculcated, demanded, or practiced, it is a serious threat to the production and distribution of goods and services, and hence to the general living standards.

From the standpoint of the extreme socialist "intellectual," it is a sort of sin to work well. Thus G. D. H. Cole says: "To do good work for a capitalist employer is merely to help a thief to steal more successfully" (*Self-Government in Industry*, 4th ed., p. 189).

Many, but not all, labor unions have output-restriction rules and practices. Such rules and practices may be direct or indirect. The indirect restrictions flow from such policies as

- (a) wage policies which put the second-rate craftsman on a par with the most capable, thus restricting the incentive of the latter
- (b) apprenticeship restrictions, as to either term or number, which lessen the number of skilled workers

Direct output restriction sometimes exists in union rules, but more often in unwritten practices. Restrictions on the daily stint, and refusal to use, or inefficient use of, labor-saving machinery and methods, exist on a widespread scale. So do requirements that less skilled workers should not be allowed to do work customarily done by skilled workers, or that more workers be used to do a task than are needed.

The nature of some of the union restrictions has been thus described by Thurman Arnold (address before N.A.M., Dec. 5, 1941):

The hodcarriers in Chicago have decided that no house builder or no contractor building an office building has the right to use ready-mixed concrete, lowering the quality of concrete and raising the price of building in Chicago. . . . Independent businessmen are being compelled to hire labor they do not need. They are stopped from giving consumers the benefit of more efficient methods or better materials.

***Output restrictions by unions may be direct or indirect.***

***Examples of indirect restrictions are equalizing of wages of more competent and less competent workers and apprenticeship policies that keep down the number of workers.***

***Examples of direct restrictions are limits on daily stint and refusal to use labor saving material or methods.***

Congress in 1946 recognized the evil involved when it enacted special legislation to prevent or limit such abuses by one union—the musicians—but has not yet been willing to declare that such anticonsumer practices by all unions should be outlawed.

The ability to impose output-restriction rules and practices on an organized basis is lessened whenever the closed-shop monopoly of labor supply does not exist. It is increased when unions are allowed to impose the closed shop upon employees, employers, and the public.

### *Seniority*

The term “seniority,” as used in employment relations, means that special recognition or consideration is given the industrial worker on account of length of service. The *U.S. Monthly Labor Review* (September 1944) says: “Seniority, in most union agreements, is a measure of claim to a job, based on length of service.”

In the past seniority has generally been restricted to preference in the case of layoffs, or reemployment of formerly laid-off employees. There have in recent years been efforts to extend seniority to cover such items as promotion, transfer, and the position of union representatives.

From the standpoint of efficient production, promotion of employees should be solely on the basis of demonstrated ability and indicated aptitude for the job ahead. If two employees are equal in these respects, then the promotion may be given, and because of its effect on individual and plant morale should be given, to the one with the greater seniority or period of past service. The beneficial psychological reaction will tend to increase over-all efficiency in the plant.

In the case of layoffs, consideration should be given to ability and productivity, to increase over-all efficiency in the plant; and if two employees are equal in this respect, the one retained should, again from the psychological standpoint, be the one with the longer service. This is the normal practice in American industry, and, in addition, family responsibility is usually given special weight.

*Seniority may properly be applied to promotion or transfer after ability and special qualifications for the job ahead have had prime consideration.*



*Labor Disputes*

Strikes and lockouts—the latter are relatively infrequent—reduce the national output. The loss in wages is large; so is the loss of profits. Much more important, however, is the effect on production—the volume of goods and services which might have been available for the public if the strike had not occurred. Not only does the public have less to consume, but it pays more for what it does have.

There was much mention during the war of a “no-strike” pledge by labor, but the facts are otherwise. For example, during the 8 months, January to August inclusive, in recent years the number of strikes was as follows:

1941	2,972
1942	2,196
1943	2,548
1944	3,520
1945	3,160

In the seven months September 1945 to March 1946, 125 strikes involved directly more than 2 million workers and during those months the loss of about 80 million man-days of work.

It is sometimes claimed that the number of strikes is unimportant, because only a small percentage of all workers is involved and only a small percentage of the working days of all labor is lost.

Any such approach is the result of either lack of knowledge or intent to evade the real issue. The fact is that, in addition to the workers directly involved in a strike, many other workers may be deprived of work, and consumers of what they might have produced. A strike of bricklayers, for example, may prevent building craftsmen in several trades from working. Consider these examples:

1. A 1944 strike of 950 bakery truck drivers in Detroit prevented bakery workers from being employed and made Detroit homes and restaurants breadless.

*Strikes and lockouts cause loss in wages and profits; more important, loss of production.*

*By strikes workers not directly involved are deprived of work and consumers are deprived of those workers' product.*

2. A 1944 strike of 1,200 employees of the Wright Aeronautical Corporation plant at Lockland, Ohio, because seven Negroes were upgraded, stopped the production of Wright engines.
3. A 1944 strike of 6,000 maintenance workers in Detroit closed 8 armament plants, reduced output in 25 others, and kept 64,000 production workers idle—yet their idle time was never shown in any official tabulations of strike costs.
4. The chairman of the War Labor Board advised President Roosevelt in August 1944 that a strike of 6,000 transport employees in Philadelphia was depriving 900,000 war workers of transportation—yet the time they were away from work was not included in official strike data.
5. A November 1944 strike of five machine operators at the Goodyear Tire and Rubber Company plant in Akron made 1,500 workers idle.

*A few strikers may thus block a large stream of production.*

Strikes reduce living scales whenever they reduce the volume of goods and services that would otherwise have been produced. They affect, however, not only the workers directly involved but also those who would have made or transported the materials used in production. They may, if occurring at a bottleneck point, force the idleness of many others who cannot work when the stream or flow of production is stopped.

It is sometimes thought that a strike is always a dispute between an employer and an employee. This is not so. Within recent years, for example, unions have struck with the real purpose of forcing the government to grant wage demands, when it has been illegal for the employer to grant them.

*Many strikes arise not from disputes with employers but from jurisdictional quarrels.*

Even more prevalent, and over many years, is the jurisdictional strike, where two rival unions are contending as to which shall do certain work. The essence of the jurisdictional strike was presented in a 1925 case in Cleveland. The city was erecting two buildings. Upon one of these a subcontractor used carpenters to do some of the metal-door installation. The Sheet Metal Workers Union

then threatened the city that unless it discharged the subcontractor or induced him to hire sheet-metal workers and to discharge the carpenters they would strike. The strike followed; the city then yielded and discharged the subcontractor, who sued in the federal courts. The U.S. District Court of Appeals declared in part:

A valid contract existed between plaintiff and the city, and the defendants (Sheet Metal Workers Union) compelled the city to break it. . . . The effort of the sheet-metal workers is to succeed over their immediate opponents, the carpenters' employer, by injuring, and threatening to injure, third parties, the building owners, who are strangers to the controversy.

Rival unions fight employers of other unionists, treat other unionists as they so often treat nonunionists, and have no mercy upon "strangers to the controversy" who must pay for the doubtful privilege of being caught in the middle of a union civil war.

The steamfitters and plumbers were engaged in a dispute over jurisdiction rights from 1899 to 1913. John R. Alpine, president of the Plumbers Union, testified before the U.S. Industrial Relations Commission in 1914 that "the loss in dollars and cents, as represented by the cessation of labor, is of such a magnitude that nobody has yet undertaken the task of computation."

During World War I at a critical period the Army Supply Base in Brooklyn was the most needed piece of construction in this country. The work had reached the point where 62 automatic electric elevators were to be installed. The unions of electrical workers and elevator constructors then entered upon a dispute as to which of them was entitled to do the work. The construction was tied up for four months at a vital period, when it was necessary to aid the successful prosecution of the war. Such disputes continue to exist. For example, during World War II:

1. In February 1944, the Mechanics Education Society of America, an independent union, called a strike in 44 war plants in Ohio and Michigan because the C.I.O. sought to make a collective bargaining contract for a tool room of Willys-Overland, where the M.E.S.A. already had a contract with the company, covering the tool-room employees.



2. In May 1944, some 125 A. F. L. machinists went on strike at the Granite City Steel Company, Granite City, Ill., over a jurisdictional dispute with C.I.O. millwrights as to which union should perform several repair operations.

*There would be fewer strikes if the closed shop monopoly were not allowed.*

Such disputes between unions, where no question of the employer's fairness or reasonableness is concerned, take up yearly vast amounts of work.

There are many types and causes of strikes, but it can fairly be said that there would be fewer strikes if the closed-shop monopoly, or power to demand it in a contract, did not exist. (For discussion of the curbing of industrial disputes, see pp. 221-224.)

### HOURS OF LABOR

If all other factors remain constant, then any reduction in the number of daily or weekly hours worked will correspondingly reduce the output produced.

*Reduction of hours will reduce output if other factors remain constant.*

But we may find that production will be decreased less in proportion, or not at all, or even increased. The most obvious answer would be to say that the worker had previously been "lying down" on their jobs and cheating the employer of the full value of the time he was paying for. On the other hand, any number of other factors might be responsible for greater production per hour per worker; for instance,

*But other factors may compensate, such as improved machinery and methods, better morale, less fatigue, and increased use of incentive payment.*

- (1) Better cooperation between management and employees
- (2) Less friction between individual workers and between groups of workers
- (3) Improved machinery, equipment, and processes installed by management
- (4) Better supervision by management
- (5) Improved handling of materials
- (6) Less total fatigue and strain on the workers, resulting in greater output per hour employed
- (7) Increased use of methods of incentive payment

When we consider the many factors which may

fect total output, we realize the difficulty of measuring the causes of either increased or lessened hourly production by the worker. It is doubtful that any analysis can fully and accurately weigh all the physical and psychological factors involved.

It is economically quite ridiculous to advocate any specific number of hours or days as a universal goal and desideratum. For example, 4 hours daily might be as much for one individual should work in certain chemical and mining operations; on the other hand, 12 or 14 hours for miners, under certain conditions, or for night watchmen, might not be overmuch. Not only must the nature of the work be considered, but we should consider, as a social factor, the amount of time which must be spent away from home by the average worker. For example, a 9- or 10-hour textile-mill worker in a mill community is probably, because of living so near his work, absent from home no more than an 8-hour building worker in some of our larger cities.

The nation, and the individuals in it, cannot progress if we accept the "lump-of-work" idea—the theory that only so much total work is available. Under this concept, if only 100 units of labor can be used to supply the wants of society and if there are 100 laborers, the situation is perfect; but if there are 200 laborers, then each must work only half a unit. The fundamental fallacy in such reasoning was excellently pointed out by George E. Roberts, vice-president of the National City Bank, as follows (1927 N.A.M. Convention Proceedings, p. 234):

So long as the people have wants unsatisfied, there will be room for more machinery, for wherever it releases labor from present uses it will release new purchasing power sufficient to employ it. There may be a shift of labor, as from carriages to automobiles, but no less employment.

Since the effect of machinery is not to reduce employment, but to increase real wages, the idea that working hours should be reduced to offset the effects of machinery is an obvious fallacy. Instead of offsetting a loss, that policy would offset a gain. Instead of preventing the working man's degradation, it would prevent his advancement. If it could be carried out, it would put an end to industrial improvement and the rise of the standard of living. The answer to the fear of machinery is to be found in comparison between labor conditions in China and the United States.

*No specific number of hours a day or days a week represents a desirable universal goal, since the nature of the work and its location need to be considered.*

*There is no fixed amount of total work to be divided among workers, as long as people have unsatisfied wants.*

*People must choose between increased leisure and increased living standards.*

*Economics would hold that workers should have sufficient leisure to prevent undue fatigue, resulting in accidents, slowdown, or absence; to maintain a demand for products for leisure use; and to have opportunity to spend a reasonable time with family, friends, etc.*

There is a fair balance to be struck between rest, recreation and leisure on the one hand, and labor, production, and possessions on the other; but it must be borne in mind that it is impossible to divide any more than is produced, and that a rising standard of living is possible only with constantly increasing production.

Society cannot progress on a theory that every increase in efficiency must be offset by a decline in individual production caused by fewer working hours; put in practice, this would mean a stationary scale of living and prevent the establishment of higher scales. As was said in our previous discussion of the productivity-irksomeness-wage principle: "When productivity, and hence real wages are high, men prefer to work relatively few hours per week for they now balance not only the irksomeness of toil, but also the pleasantness of leisure, against the utility of the pay." As output goes up, people as a whole choose whether to keep living standards where they were and to increase leisure as much as the increased output ability permits, or to take no increased leisure but to increase living standards as much as the increased output ability permits, or to increase both leisure and living standards.

### *Both Social and Economic Considerations Involved*

From the standpoint of economics the work day and the work week should be of a length which would result in continued production of goods and services at a low unit cost and enable the worker as a consumer to purchase the goods produced. This means

- (1) that the worker should have sufficient leisure to permit adequate rest, thus reducing absenteeism and labor turnover;
- (2) that he should have sufficient leisure also to create and maintain a demand for many convenience and luxury articles;
- (3) that he should not be permitted to work in his day assignment beyond the point when production slows down and the accident rate increases.

Any work lessens the opportunity of the individual to spend time with his family or in performance of social and community functions. The length of the work



period thus involves social as well as economic considerations; even where not economically harmful it should not deprive the worker of a reasonable amount of time with his family and friends, or for social and community activities.

It follows, therefore, that there can be no universally fair and applicable work-period standard for all times, individuals, industries, and communities.

### *Average Hours of Labor*

The average number of hours worked per week in manufacturing has been as shown in Table 6. Following 1929 the average dropped sharply, owing to curtailed operations in the depression period and to efforts to spread the work." Then, as European and American demobilization and war orders flowed in, the average hours again increased substantially. The average for 1935, 1936, and 1937, highest years of the thirties (except for 1939, influenced by war-goods demands), was 38.5 hours. The long-term trend is, however, best shown by the table.

*The average of hours worked per week in manufacturing declined from 69 in 1850 to 59 in 1900 and 48 in 1920. In 1937 the average was 38.5.*

TABLE 6

Year	Hours	Year	Hours
1840	68.4	1900	58.8
1850	69.0	1907	56.6
1860	66.6	1914	51.5
1870	63.0	1920	48.2
1880	61.8	1929	48.3
1890	60.0		

### *The 30-Hour Week*

During the thirties there were demands, particularly by union spokesmen, that Congress establish by law a maximum 30-hour week (although by many people this was thought to be a subterfuge to obtain overtime pay, especially for skilled workers), with every employer required to pay the same amount for 30 hours that he had previously paid for any longer period. There can be no question but that this or a similar demand will again be made in periods of unemployment, the claim being made that the reduced hours will provide employment for all.

*The recurring agitation, in times of reduced employment, for a 30-hour week with unchanged weekly pay ignores the consequent rise in unit costs and restriction in scale of living for all but previously unemployed.*

*If hourly rate of wages is not changed, then workers reduced to 30 hours would have less purchasing power.*

The 30-hour-week advocates assert that, when adopted, it must be accompanied by the same pay as any longer previous period. It is obvious that, other factors remaining constant, a decrease in the number of hours worked and increase in the hourly wage rate will increase the unit cost of production. The result would naturally be higher selling prices, and, as a result of such higher prices, reduced sales and lessened total production. Indeed, the 1928 A.F.L. convention advocated fewer hours and days per week specifically in order to reduce the volume of production. You cannot decrease the volume of production, having the same total pay roll as before and the same overhead costs, without increasing your unit production costs (unless there be an offsetting decline in material costs, which is certainly unlikely). If a compulsory 30-hour week with the same weekly pay is started after there is a large amount of unemployment, the threat is that the unemployed will be hired and given purchasing power and that the volume of production will not decrease. Even assuming that the previously unemployed would be as proficient as those whose hours would be reduced, it would still be true that hourly wage rates would be higher, that unit production costs would rise, that housewives, as well as farm, white-collar, and factory workers, would have to pay more than before, and that for most of them this would mean reduced living scales.

If the work week is arbitrarily reduced to 30 hours during a period of unemployment, at the same hourly wage rate as previously, unit production costs will stay constant (if the new workers are equally efficient) but the workers who had their hours reduced will be able to buy less than before.

These considerations point to the danger of concluding that the compulsory 30-hour week would be good, or all bad, or some of both. It may be that as technology improves people could have 50 per cent more goods but would prefer to take 25 per cent more goods and work fewer hours. On the other hand, a compulsory reduction of hours not based on improved technology might actually result in distortions (for example, inability of a "bottleneck" industry to find additional skilled workers of a par-

ular ability) which would create unemployment in certain segments of the economy.

If productivity is such that people as a whole want to work only 30 hours a week, or even less, no objection can be raised; the average work week should not be an arbitrary arrangement but the natural result of what workers want in relation to their pay. If society as a whole wants more leisure and less production, it will have them; if it wishes more production and less leisure it will so decide—not as of a given moment but as the result of general desires and general trends. That is the way great social changes have come about.

A compulsory 30-hour work week, imposed as a reaction from a longer average work week, might work out all right in some cases, but create economic maladjustment in others. It should be judged in each specific company by these considerations:

- 1) Effect on total volume of production
- 2) Effect on unit production costs
- 3) Effect on total number employed
- 4) Effect on the individual employee; how it would affect his health, his relationship to other members of his family, his ability to keep in both physical and mental trim
- 5) Desirability in a company of keeping the whole working force together instead of maintaining a skeleton force

If the total volume of employment would not be decreased, then the compulsory 30-hour week would not achieve the chief end of its union advocates.

If the total volume of production would be decreased, consumers would be the losers; if unit costs were increased, consumers must pay higher prices; if consumers purchased less, the volume of production would decrease and fewer workers would be employed. In the latter event both the consumers at large and the workers in industry would suffer.

If the compulsory 30-hour week is used simply to secure overtime pay at above normal rates from employers,

*Consideration of a 30-hour week by any company should include effect on volume of production, on unit costs, on number employed, on individual employees; also desirability of keeping whole working force together during a business recession.*



then it is illusory and uneconomic and must result in higher production costs.

As a broad generalization we can say that shortening of the work period is most apt to increase unit production costs in industries using the smallest percentage of machine power. In the automobile factory, for example, the effect on unit costs will logically be less than in the construction industries.

It may be socially desirable under certain circumstances publicly to limit the work day or work week in order to preserve employees' health or public safety. But it may be pointed out that any compulsory imposition of a uniform maximum work week substantially below the prevailing level of hours

- (a) will lead to distortions between industries;
- (b) where shortages of labor exist in some trades but not in others, will lessen employment opportunities and production in many plants, communities, and industries; and,
- (c) if accompanied by increased unit production costs (owing to maintenance of former weekly wages) will raise prices to consumers.

Since demands for a compulsory maximum work week are usually most clamorous when the general population has already decreased its purchases, any proposal further to increase prices to consumers would further decrease purchases. It would be really an antilabor measure.

We may further safely assert that any widespread increased adoption of a shorter work week, except through legislative compulsion, will come not as a result of unmet demands, but as a result of improved methods and machinery of production and improved employee-management cooperation.

Why have not the great improvements in machinery and processes since 1750 resulted in a life of leisure for all? If society had not demanded ever higher living standards, more comfort and luxuries, then doubtless none of us would, with our present equipment and knowledge, need to work more than 2 hours daily—but we should

*A compulsory work week much below current practice would lead to distortions between industries; reduce employment opportunities in many industries and communities; and, at same weekly wage, would raise prices, reduce consumption, and so work harm to labor.*

*Shorter work week may come normally as a result of improved methods and machinery of production and improved labor-management cooperation.*

not be living any better than our ancestors of 1750. Who wants to make the change?

### EMPLOYMENT REGULARIZATION

During recent years industrial management has realized the benefits to labor, industry, and the public as a whole which would result from a greater regularity of employment; it has sought to find and apply methods which would reduce fluctuations in production and accomplish a more stable level in the volume of industrial employment.

Some companies (such as shipbuilders and locomotive builders) can do little or nothing to stabilize their own employment; many can do more than they realize; several have achieved a marked degree of success. Where companies have been able to regularize employment, in addition to the benefits, both economic and psychological, to employees, there have been financial gains to the employers, including

- 1) Reduction of tax rate through merit-rating provisions in the state unemployment compensation laws
- 2) Increased efficiency of the plant
- 3) Greater use of plant and equipment
- 4) Lower production and labor costs, including costs of accidents
- 5) Avoidance of overtime penalties during peak periods
- 6) Reduction of labor turnover costs, including elimination of expense incidental to the examination and training of new employees
- 7) Reduction of absenteeism
- 8) Increased versatility and flexibility of employees, due to their increased experience
- 9) Upgrading of workers

As far as industrial companies are concerned, their employment regularization efforts are directed primarily at stabilizing production and employment. The methods

*In recent years industrial management has tried to reduce fluctuations in production and stabilize industrial employment.*

*The results have been beneficial to both employers and employees.*

and techniques utilized are in three main fields: production, distribution, personnel. Some of the major methods used are

### In Production and Distribution

*Methods used include better forecasting of demand, closer coordination of departments, diversification of products, widening of markets, stimulating off-season business, development of new uses of products.*

Better forecasting of sales volume  
 Closer coordination of manufacturing, sales, advertising, and warehousing departments  
 Scientific production control  
 Inventory accumulation and control  
 Diversification of products  
 Widening of markets  
 Stimulation of off-season business  
 Special discounts for slack-season orders  
 Special sales campaigns to induce spreading of year-around business  
 Introduction of new models during dull seasons  
 Use of special advertising to change consumer buying habits  
 Special advertising campaigns to develop new uses for old products  
 Efforts to reduce business costs and selling prices when business slackens

### In Personnel

*In regard to personnel, methods include forecasting of requirements, training for versatility, departmental and plant interchanges, control of hiring on upturns.*

Forecast of personnel requirements in relation to estimated sales volume and production budget  
 Training of employees for greater versatility  
 Departmental interchange of workers to dovetail busy and slack periods  
 Use of "special squadrons" (special groups of employees) to carry peak production loads in different departments on a rotating basis  
 Interchange of employees between a company's different plants in accordance with peak and slack seasons  
 Control of hiring, by careful "holding down" of the number of new employees hired for peak seasons; and by careful control of production as to avoid hiring new employees on business



upturns who would have to be discharged when peak is passed

Averaging work hours (This method is now restricted by the Wage-hour Law. Companies who have in the past found the averaging of work hours effective point out that since the Wage-hour Law has been in effect certain restrictions under the act against the use of this method have set up a new obstacle to the goal of stabilized employment.)

Despite the facts that employment regularization may be financially beneficial to employers and that some companies have been able to provide it for a substantial proportion of their employees, factors exist which limit the ability of many firms to accomplish employment regularization.

### Limiting Factors

Foremost among the factors which tend to prevent employment regularization is the difficulty of advance planning in certain industries because of

Style factors

Irregularity of seasonal fluctuations

Cyclical fluctuations

Changing seasonal demands

Obsolescence of products

Physical problems of warehousing advance inventories

Production schedules controlled by customers' requirements

New machinery and tool requirements for changing models and designs

Weather

Operation in many industries on a "custom-made," "job," and contract basis

Tremendous capital requirements for building advance inventories

Dependence of many industries on such factors outside their control as conditions in other markets and other industries

*Factors limiting regularization of employment in some industries are style changes, seasonal and cyclical fluctuations, obsolescence of products, warehousing space, contract basis of production, dependence on other industries, rigidity of costs, etc.*

Close relation of many industries to the general business level of the country and the necessity to conform thereto

Rigidity of wage rates, taxes, and other business costs

### *Guaranteed Employment*

*Guaranteed employment plans have been worked out by some companies gradually, but union demands for general adoption of similar plans are not thereby justified.*

During 1944 there have been numerous union demands, particularly C.I.O., that employer-union agreements contain provisions for guaranteed employment—more accurately, for a guarantee of pay for a certain number of weeks or hours during the year. To a considerable extent these demands have been due to the union desire to insert demands which, even if rejected, might lead to concessions on other demands; partly to give the impression to union members, earning in many cases wages which cannot be increased, that the union is always “on the job” and will bring the union member more benefits if he will just keep on paying dues. The union campaign for guaranteed employment has, of course, been advantaged by having the example of some very successful company plans of guaranteed employment. All too frequently they assume that what some companies have done any other company can do, regardless of whether the conditions of production and distribution are equivalent; they ignore the fact that usually such company plans have been installed slowly, that they frequently exist only in certain departments, and that there is usually a service period with the company before the protection of the plan is accorded an employee.

In addition to the factors listed in the preceding section which make it difficult, if not impossible, for many companies to provide employment regularization, the following points should be noted concerning the union demands:

*Labor leaders have testified to impracticability of extending annual wage*

1. Many are for establishment of such plans in all firms in an industry at the same time. Such proposals do not take into account the varying financial situations of different companies, or the fact that even within an industry companies may make different products, with comparative regularity of demand for the goods of each.

company and complete irregularity of demand in the case of another company.

Philip Murray, president of the C.I.O., has himself declared (with M. L. Cooke, in *Organized Labor and Production*, 1940, p. 122): "Experience to date raises doubt as to whether annual wage plans can be extended over a wide area of business activity, for basic to their success is the stabilization of operations."

John L. Lewis, when president of the C.I.O., said (Hearings on Profit Sharing, by a subcommittee of the Finance Committee of the U.S. Senate, 1938, p. 198): "The circumstances affecting the average employer of labor in competition with others in his industry are such that it is impossible for him to guarantee the payment of so much a year to his employees, because circumstances may result in his not being able to operate his plant the requisite number of days. . . . I do not see how an employer, whether he is in the contracting business, manufacturing business, mining business, or what not, can undertake to pay so much a year except as he has a rather constant assurance of production."

2. In the cases of some companies, guaranteed yearly pay would increase costs. Increased costs in such companies will either

- (a) reduce profits, tend to lessen the attractiveness of investment, and thus tend to make jobs scarce in the industry or company; or
- (b) increase prices to consumers of the product, either reducing demand for the particular product or lessening the amount of buying power available for expenditure on other products—again, in either case, tending to lessen employment opportunities; or
- (c) reduce wages if the same volume of employment is to be maintained.

3. In the cases of companies which, because of the existence of one or more of the factors listed previously (p. 209), cannot regularize employment, no employment pay guarantee in a union agreement will be worth anything unless

*plans throughout industry regardless of differing conditions.*

*In many cases costs would be increased so as to reduce profits and discourage investment, or to increase prices and reduce consumers' purchasing power, or to reduce wages in order to maintain employment.*

*In other cases, where employment cannot be regularized, no guarantee*



*would be valid unless customers were somehow coerced into regularity of purchases or taxpayers provided employers' indemnity against loss.*

*No one manufacturer in a competitive market can be assured of continuity of sales unless competition is restricted, as to new entries into an industry or freedom of customers to choose, by government or by an association in the industry.*

- (a) the union forces customers to buy the company products at regular intervals; or
- (b) the government either forces such regularity of purchase, or gives the company an indemnity of some kind against loss. This would force all taxpayers to prevent loss to some taxpayers. Thus the steel workers' guarantee would be made good by taxpayers as a whole or by the customers of the steel industry. In either event, those taxpayers and customers would have less to spend and other suppliers and other employees in the nation would suffer. The union proposal would simply ask others to guarantee them against loss—rather, it would seek to *force* others to make this guarantee.

4. Whereas continuity of demand can reasonably be anticipated when there is only a major customer, as during a war, it cannot be anticipated that, when there are several purchasers, each of the companies from which they buy can be sure either of a total volume of sales or of regularity of sales. No such assurance could be possible unless

- (a) the government declared that only companies formerly making a product could continue to do so; or
- (b) the government declared that purchasers must continue to buy the same goods as before, and from the same supplier; or
- (c) industry groups were allowed to allocate production among member firms, to compel all firms in an industry to belong to the association, and to prevent new entrants into an industry.

Any of these measures would involve the suppression of competition among firms in an industry, thus stifling technological progress; and among customers, thus eliminating the creative force of consumer demand and freedom to adjust production accordingly.

5. If a considerable part of the output of a company or industry is exported outside the United States, no guaranteed pay plan could succeed unless the continuity of the foreign demand could be guaranteed.

6. No guaranteed pay plan for an industry could

succeed unless increased foreign imports were prevented— in other words, unless some sort of domestic monopoly were assured.

7. If the guaranteed pay plan resulted in the necessity of paying for work not done, the efficiency of work would be impaired since much of the incentive to do good work would be removed.

8. Pay for work not performed would be a form of charity, which is not what competent workers want.

9. The demand for guaranteed pay, if seriously presented, rests on, or implies, a belief that a company or industry can itself determine the price of its product and the quality and quantity the customers will buy, and that hence the company or industry can pay without economic limit any taxes, wages, or other costs.

10. The union demands (as in the case of the steel industry) are for a minimum pay guarantee for each week, regardless of the number of hours worked. In other words, the employer would not be allowed to average the hours worked; in a week when the employee worked 32 hours he would be paid for 40, and when he worked 48 hours he would be paid for 48. Any economically logical guaranteed pay plan should allow for a reasonable averaging between weeks of high production and weeks of low production.

11. The union demands would impose guaranteed pay plans universally throughout a company, although it might be economically feasible only in some departments of the company.

12. The union demands make no provision for allowing the employer to shift workers to any available job, including maintenance and repair work, and without regard to seniority; nor do they provide for lower wage rates where such reduction would be effective in stabilizing production.

13. 1944 C.I.O. advertisements for a guaranteed annual wage declared (*Tide*, August 1): "Since the government has guaranteed industry profit for two years . . . in full fairness to the welfare of the nation, the corporations which government guarantees against losses must help safeguard their employees with a guaranteed annual wage."

*Incentives to improvement would be curbed by monopolistic arrangements, and efficiency of workers would be reduced by unearned pay.*

*Union demands for a guaranteed wage take no account of economic feasibility.*

*The argument used that government has guaranteed profits to industry rests on no foundation of fact.*

This plausible statement rests on a falsehood, that corporations have been guaranteed against loss.

The tax provisions referred to in the union advertisement "at the most put a ceiling upon the taxes which the corporations will have to pay, by authorizing the Treasury to take into account operating results in succeeding years in determining what the true profits of the business were . . . Nor does the legislation result in a guaranty fund, a fund for reconversion, or an obligation to pay high wages to employees" (Statement of Roswell Magill, former Undersecretary of the U.S. Treasury, to the National War Labor Board Steel Panel, May 23, 1944).

## GOVERNMENT REGULATION

*Government regulation of employment relations has a long history, but was confined until recently to exercise of the police powers of the states.*

*The courts' interpretation of interstate commerce long restricted federal regulation; but this interpretation was broadened greatly in the 1930s.*

For many years the police powers of the states were used to impose restrictions in the field of employment relations—such matters as maximum hours of work for women (the first such law was passed in Massachusetts in 1879), prohibition of labor of persons under some specified age, safety and health requirements, regulation of the maximum hours of truck and bus drivers, workmen's compensation laws, prohibition of night work for women.

Congress passed similar laws for railroad employees (1907 and 1916), also a law (1914) interpreting the applicability of the Antitrust Act to labor organization. But it was for a time held by the federal courts that the federal government had no power to regulate employment relations in a store or factory, since the process of production was held not to be itself a phase of interstate commerce.

In the thirties, however, the U.S. Supreme Court reversed itself. The result was enactment by Congress of the Guffey Coal Act, regulating the bituminous coal industry, the Wagner Act, the Wage-hour Act, and the Smith Connally Labor Disputes Act (enacted as a war measure). In addition, Congress enacted a Social Security Act which established a federal old-age annuity system and practically compelled the states to enact unemployment compensation legislation.

Apparently the constitutionality of such federal



islation must now be accepted. The merits of the individual acts may still be discussed, however, and even if the legislative measures continue it is only reasonable in the light of history to expect that they will be amended.

### *Anti-injunction Legislation*

In 1932 Congress passed and President Hoover signed the Norris-La Guardia Anti-injunction Act. This act forbids the issuance by federal courts of injunctions to restrain the organization and maintenance of strikes for any and all purposes, however oppressive or criminal they may be, as for instance strikes to interfere with the mails, strikes called to extort graft, strikes to boycott open-shop products, strikes called in violation of contract. Even if abuses occurred in the issuance of injunctions in labor controversies, the Norris-La Guardia Act went too far, since it virtually destroyed the possibility of using a valuable device for the protection of citizens in cases involving violence and intimidation. This act is clearly class legislation—in favor, it may be noted, of militant organizations already enjoying a large measure of legal privilege and immunity.

Far from having been an infringement upon individual rights, the injunction process has protected them. Justice Brewer of the U.S. Supreme Court aptly said in Brooklyn, Nov. 23, 1909:

As population becomes more dense, as business interests multiply and crowd each other, the restraining power of a court of equity is of far greater importance than the punishing power of a criminal law. The best scientific thought of the day is along the lines of prevention rather than those of cure. We aim to stay the spread of epidemics rather than to permit them to run their course and attend solely to the work of curing the sick. And shall it be said of the law, which claims to be the perfection of reason and to express the highest thought of the day, that it no longer aims to prevent the wrong, but limits its action to the matter of punishment? To take away the equitable power of restraining wrong is a step backward toward barbarism rather than a step forward toward a higher civilization.

The same principles of public law should be applied and enforced against all forms of combination; it is wrong to make it lawful for one group of citizens to do that

***The Anti-injunction Act of 1932 forbade the courts to restrain organization and conduct of strikes, however unjustified or violent or oppressive of the public.***

***It is wrong to make it lawful for one group of citizens to do what would be unlawful or criminal if done by another group.***

which is held unlawful or criminal when done by another group.

The federal Anti-injunction Act is class legislation and should be repealed or substantially modified.

### *The Wagner Act*

*The National Labor Relations Act (1935) had the declared purposes to protect the rights of employees to organization and collective bargaining; to require employers to recognize this right; and to set up procedures to determine who properly represent employees in bargaining.*

The Wagner National Labor Relations Act was enacted in 1935, and upheld by the United States Supreme Court in 1937.

The declared purposes of the act are

- (a) to protect the rights of employees to self-organization, to form or join or assist labor organization, "to bargain collectively through representatives of their own choosing";
- (b) to prohibit an employer from (1) restraining or coercing employees in the exercise of their right of collective bargaining; (2) dominating or interfering with or assisting financially any labor organization; (3) encouraging or discouraging membership in any labor organization except that he may agree to a closed shop; (4) discriminating against employees who file charges under the act; (5) refusing to bargain collectively with the representatives of his employees; and
- (c) to establish procedures for determining who represents employees for collective bargaining.

A National Labor Relations Board was established to administer the act. The Board was pretty largely disregarded during World War II (being by-passed in favor of the War Labor Board), but since this is, presumably, the permanent government body to regulate labor relations in peacetime, it needs our consideration.

Hundreds of pages have been written, including testimony in legislative hearings, as to the operations of the act. From all of this the following points stand out:

1. The employer does not possess an equal right with the union to ask for an election to determine who represents employees; when such a right was proposed in 1942 it was bitterly fought by the unions.

*Its operation under NLRB shows that employers do not have equal rights with unions in asking an election to determine proper representation;*

2. Coercion of employees by the employer is forbidden, but such coercion by employees or representatives of labor organizations is not forbidden, nor is there any penalty for such coercion.

3. The National Labor Relations Board serves as investigator, prosecutor, jury, and judge—a system which could be useful only in a communist or fascist dictatorship.

4. The act establishes ends—the free flow of commerce; the diminution of the causes of labor disputes and strife; the right of employees to select their own representatives for purposes of collective bargaining—to which none can take exception. But the accomplishment of these ends is impossible when it is provided that only one of the two parties, the employer, can possibly commit an offense.

5. In practice, the Board endeavored to suppress free speech by employers, but this has been partly corrected by the courts.

6. "Strikers" are treated as "employees," regardless of the nature of the strike.

In the interest of justice and of national economic efficiency, the Wagner Act should be substantially amended

- (1) define and prohibit a list of unfair practices by labor organizations;
- (2) preserve for both employers and employees the right of free speech;
- (3) prohibit coercion or intimidation of employees in any phase of employment relations from any source;
- (4) retain the act's provision against the employer's encouraging or discouraging membership in any labor organization, but eliminate the exception permitting the employer to compel employees to belong to a union to obtain employment;
- (5) deny the rights of the act to labor organizations which have collusive agreements with a group of employers—the latter agreeing to hire only union members and the former agreeing to work only for the particular employers;

*that coercion of employees is forbidden to employers but not to other employees or labor representatives; that the NLRB serves as investigator, prosecutor, jury, and judge; that only employers can be penalized for violation.*

*Ten amendments to the act would remove those incongruities and injustices and promote national economic peace and efficiency.*



- (6) modify or eliminate the act's treatment of "strikers as "employees" in elections for purposes of determining who shall represent "employees";
  - (7) compel the National Labor Relations Board to act upon bona fide requests by employers for election to determine representatives of employees;
  - (8) provide that the Board shall not favor any particular union or form of employee organization;
  - (9) separate the functions of the Board as a fact-finding body, prosecutor, and judge;
  - (10) provide that no labor organization shall be qualified to represent employees or otherwise claim rights under the law which denies legal responsibility for the acts of its officers and agents.
- (See the seven points listed on p. 220.)

Collectively, these 10 amendments would, in operation, substantially correct the one-sided character of the act and its biased administration.

### *Union Responsibility*

*When business was believed to have too much power various restrictive laws were enacted.*

*Individuals and groups seldom give up power voluntarily.*

*National labor unions are now "holding companies"*

When the public believed that "business" was becoming too "big" and that its power could be used against the public interest, various restrictive laws were passed and regulations adopted. Without reference to the merits or demerits of any specific rule or regulation designed to curb "business," it must be realized that where power exists there is a tendency to use it, that control over the exercise of that power is resisted, and that individuals and groups seldom voluntarily relinquish power possessed by them. President Green of the A.F.L. has very soundly observed:

It is inherent in man to abuse uncontrolled power [Weekly News Service, June 9, 1928].

It is the world's experience that men will not voluntarily surrender their power [*ibid.*, Sept. 8, 1928].

This observation is especially pertinent to the large national labor unions, which are huge combinations of "holding companies" in the field of labor, possessing power which can be used to oppress employees not belonging to

the union, as well as employers and the public. Those are naïve indeed who believe that labor monopolies any more than industrial monopolies can be trusted not to take advantage of their monopoly position. Certainly no industrial monopoly of the past or present has been comparable, in size, scope, and ability to paralyze the body politic, with the modern labor-union monopolies.

No form of combination should be permitted to acquire and exercise power without accepting corresponding legal responsibility for its own conduct and that of its officers and agents. Yet this basic principle of social justice, which should be applicable to combinations in every field of economic and social life, is vigorously opposed by the labor unions.

The organized labor movement cannot be limited [President Green of A.F.L., at Building Trades Department Convention, September 1927].

The workers will not concede that the community has any purpose or intention to render justice to the workers, should it force itself into participation in industrial relations [Secretary Morrison of A.F.L. in *New York Times*, July 18, 1920].

A union attitude toward social responsibility and fair play was set forth in the following 1922 testimony by President Gompers of the A.F.L. before the Lockwood Committee of the New York State Legislature:

Q: Take a case in which the officers steal the funds of the union, and there are no books to show and no way of proving that they steal; don't you think that the legislature should regulate these associations to the extent of requiring that they should keep books of account of their receipts and expenditures in the interest of common honesty?

Mr. Gompers: I think that the legislature should not interfere in the matter at all, regrettable and bad as the conditions may be.

[Then again Mr. Gompers was asked:]

Q: Suppose an employer begins a suit to enjoin a labor union . . . and one of the members of the union makes an affidavit on request as to the facts as he understands them. Do you think that is the proper subject of a fine being imposed against that member?

A: If it is done, if the affidavit is made to help the employer in his contention against the union, I think it is wrong.

Q: But suppose the employee is telling the truth.

A: That may be.

Q: You don't think he should assist the administration of justice by telling the truth?

*and monopolies whose vast power can be used to oppress workers, employers, and the public.*

*Such power requires corresponding legal responsibility, but union leaders vigorously oppose any public controls.*

A: I don't think he should assist the employer in a contention with the union of his trade or calling.

Should some form of legal responsibility be imposed upon labor unions?

In the first place, if the unions wish to function as private bodies which negotiate with employers, but do not claim the support of state or federal legislation in doing so, then the government, either federal or state, should not intervene to say how the union should be operated.

Second, if the unions do seek to exercise privilege granted by law, then it is logical to stipulate that they prove their worthiness of the legal privilege.

The exercise of the legal privileges granted by law should be confined to unions which

*Legal privileges granted by law to unions should be accompanied by requirement of fair elections of officers for limited terms by secret ballot, audited accounting of receipts, acceptance of responsibility for acts of officers or agents, and secret ballot before a strike is called. Political contributions also should be outlawed.*

- (1) elect their officers for a limited term by secret ballot and after reasonable notice to all members;
- (2) hold a union convention at least once every four years;
- (3) make an audited accounting of receipts and disbursements to their members at least once a year;
- (4) confine the holding of office to citizens of the United States;
- (5) make no contribution, directly or by device, to political parties;
- (6) accept responsibility for the acts of their officers and agents; and
- (7) call or support strikes only after a secret ballot of union members directly involved in the dispute.

The requirement that unions accept legal responsibility if they wish to represent employees under an existing law would in no way injure the legitimate efforts of workers to organize as they consider best to promote and protect their economic interest. But misuse of that power, to the lasting injury of employees, employers, and the public should be prevented. Society has rightly distrusted concentration of power and in its own interest should continue to do so.

The right of any worker who wishes to join a labor



organization should be protected. So should the right of a worker to refrain from joining such an organization.

The right to bargain collectively by workers who desire to do so should be protected. But there should be no right, and should be no power, to compel workers who do not wish to do so to bargain collectively through a particular organization, nor should there be any power to compel an employer to accept union demands.

Justice Brandeis well said:

The plea of trade unions for immunity, be it from injunction or from liability for damages, is as fallacious as the plea of the lynchers. If lawless methods are pursued by trade unions, whether it be by violence, by intimidation, or by the more peaceful infringement of legal rights, that lawlessness must be put down at once and at any cost [*Business—a Profession*, 1914 ed., p. 26].

In the social interest equal responsibility and control should exist for all forms of organization or combination which possess power to threaten the public peace and safety.

### *Industrial Disputes*

We do not discuss the manner in which the government should deal with industrial disputes in wartime.

But because of indignation over wartime strikes followed by far-reaching nation-wide postwar strikes that have crippled industry, impeded reconversion, and disturbed the economic life of practically the whole nation, the public has come to support, even demand, curbs on strikes in peacetime. The public was aroused during the war over

strikes which prevented shipments of blood plasma to troops (Parke-Davis Company strike);  
strikes after a majority of employees voted against striking (Electric Boat Company strike);  
strikes to prevent the employment of women or Negroes (Brown and Sharpe strike and strike on the Philadelphia transit system);  
strikes to compel the War Labor Board to grant wage demands the employer could not legally grant;

*The public was aroused over strikes which prevented shipments to troops, which were not sanctioned by a majority of employees involved, which sought to prevent employment of women or Negroes, or which were in defiance of government.*

strikes in defiance of War Labor Board rulings and of the President of the United States (Petrillo and the American Federation of Musicians, for instance, who forced employers to submit to union tax upon production after President Roosevelt had said the government was powerless to force the union to comply with the War Labor Board's rulings); and

acts of the government in seizing the property of employers when they were conforming with the law, while refusing to dissolve or take over the operation of labor unions which defied the law.

*Failure to provide reasonable regulations regarding strikes may lead to measures of undue restriction of labor's freedom.*

There has been danger that public resentment over such strikes and such government action—and over such things as union demands for “work permit” fees before nonunionists could work on needed defense construction—would lead to extreme action; and that resentment has not been cooled by examples of unnecessary strikes since the war's end, when full production of peacetime goods was impatiently awaited.

Since the close of the war, indeed, public opinion has been stirred as seldom before to the critical character of the strike problem, by

*Public opinion has been aroused still more by far-reaching and crippling postwar strikes.*

the strikes throughout the automobile industry which for months kept hundreds of thousands of workers idle and shut down production in one of the nation's greatest industries;

the steel strike, prolonged for many weeks and likewise involving hundreds of thousands of workers affecting all steel-using industries and holding up the construction of urgently needed housing as well as the manufacture of countless other goods;

the coal strike, which struck at an equally basic industry of the nation with devastating effects on a multitude of essential activities;

the railroad strike, which practically paralyzed the industry and commerce of the nation during its brief duration, requiring the direct action of President Truman for its settlement;

the shipping strike, in which both A.F.L. and C.I.O. unions sought to compel the federal government to approve higher wages than its anti-inflation policy permitted;

the New York trucking strike, in which some striking unions of truck drivers prevented other truckers from working under union agreements and prevented farmers and out-of-state truckers from entering New York; and

countless other strikes, some likewise of nation-wide significance, others affecting large sections of the population, geographical or occupational, too numerous and too fresh in people's minds to require further listing.

It is true that every strike reduces production and decreases productive efficiency, and in some industries continued strikes may amount to national disaster. But that does not mean that strikes should be indiscriminately prohibited.

In addition to economic efficiency, Americans wish to preserve freedom. It would be a threat to freedom to seek either to prohibit individuals or groups of individuals from striking against private employers or to compel either employees or employers to accept the judgment of some government agency as to what employment conditions—including wages—should prevail. In fact, loss of freedom might well bring less over-all productive efficiency than even the existence of strikes.

But it is perfectly fair to provide that in the public interest strikes may occur only under certain conditions and restraints. These provisions might include

- (1) that no strike shall be called or supported except after a secret ballot;
- (2) that strikes should not be called to compel the government to take some action; and
- (3) that strikes to compel the breaking of an existing agreement should involve forfeiture of the union's legal privileges of representing employees in collective bargaining.

*Government should not try arbitrarily to prohibit strikes, but is entitled to set certain conditions and restraints.*



And it should likewise be provided that the man who wants to stay at work instead of going on strike should be protected in his right to do so, a right just as valuable as that of a man who so wishes to strike or quit work. The right to work without coercion or intimidation of either the worker or his family should be protected by public authorities at all times.

The great strikes of the 1945 and 1946 reconversion period justify these observations:

*Government, however, must not submit to coercion by its own employees.*

*It should not seize private property, except in emergency, to settle labor disputes.*

*But it should protect the right to work.*

*The Federal Wage-hour Act (1938) has been interpreted to*

1. Employees of government-owned industries and government employees, and the government, as a supreme body, must not yield to force or threat from some part of the body politic as to acceptance of decisions made by representatives of the body politic as a whole. This principle supports the idea that there is "no right to strike against the government."

2. Equally, however, there is no peacetime justification for government seizure of private property when employers and employees do not agree.

3. When the government does seize private property in order to avert national economic breakdown—and should be noted that such seizures usually seem necessary only because of weakness and vacillation in government policies—then the government should maintain the *status quo* on all matters in conflict between employers and employees and should not impose new conditions and requirements on either, which would be expected to be continued when the properties were returned to private ownership.

4. Government does, however, have an obligation to prevent the coercing of people who want to work by those who do not. This applies to all branches of government—local, state, and national.

### *The Wage-hour Act*

In 1938 Congress passed, and the President signed, the Federal Wage-hour Law. Designed to apply only to the employees of an "employer" in an "industry" engaged in interstate commerce or in the production of goods for such commerce, it has been interpreted to include in it

coverage many not generally thought to be included when the act was passed, including service employees in office buildings. Other classes of workers that have been held by the courts and the administrator to be engaged in "production" include

- (1) Employees of an irrigation company maintaining the irrigation facilities from which water is taken by the farmers to assist in the production of crops which enter the channels of commerce
- (2) Employees of a ready-mixed concrete company who mixed concrete and dumped it at an oil-well base in the state where the concrete was produced
- (3) Employees engaged in mining gold which was sold to the government in the state where it was produced and which was prevented from entering the channels of commerce under the Gold Reserves Act
- (4) Employees engaged in drilling for oil even when the well was dry
- (5) Employees engaged in manufacturing ice which was sold to railroad companies and trucking companies for icing refrigerator compartments used in carrying perishable goods in interstate commerce
- (6) Employees engaged in repairing buildings and other facilities in which goods for commerce were produced
- (7) Employees engaged in connection with the repair of city streets, since such streets, it was said, might be used in interstate commerce

Employees engaged in an "executive, administrative, professional, or local retailing capacity or in the capacity of outside salesmen" are excluded from the act, as are agricultural and fishing employees; also learners, apprentices, and handicapped workers.

During the first year the minimum wage was 25 cents per hour, during the next 6 years 30 cents, and now 40 cents.

It must be noted that while the act does provide minimum wages, it was not really designed to set maximum

*cover classes of employees not directly engaged in interstate commerce or production of goods for such commerce.*

*Some examples are service employees in office buildings, workers engaged in repairing streets or office buildings or other facilities for commerce, and oil drillers.*

*Some classes of employees, however, are excluded.*

*Higher pay for overtime was a prime motive of the act.*

*The act puts a curb on young and ambitious workers, and restricts averaging of hours for stabilizing workers' incomes.*

hours, but to compel payment of overtime (time and half) for any extra hours. This feature of the act is effect a wage device, and has little significance in social purpose.

One of the worst features of the act is the curb puts on the young and ambitious worker, who cannot spend extra hours on the job—whether in shop, laboratory, office—trying to improve and advance himself, without penalizing the employer.

The act likewise prevents (Sec. 7-b) efforts to stabilize the yearly income of the employee by averaging hours, except where agreements are made with labor union—class legislation, not for the benefit of workers as a whole but for a segment of labor. The act should be amended to include any plan for the averaging of employment hours found by the administrator to safeguard the welfare of employees and to provide for the averaging of their pay over the period involved.

## V. POSTWAR PROBLEMS

*Postwar problems include some special problems not treated in earlier sections of this chapter.*

Each of the problems previously considered has lost nothing in importance since the war ended. The problem of incentive pay, equal pay for equal work, and guaranteed yearly pay may be especially noted. But there are also a number of problems which existed in prewar years and during the war, and have taken on still greater importance as postwar problems. Of these we will consider only employment of veterans, employment of women, supervisory relations, industry-wide collective bargaining, labor participation in management, and full employment.

### EMPLOYMENT OF VETERANS

*In employment of veterans several problems are: many will not be content with former jobs; many were never before*

There is a legal obligation to reemploy, in the former or comparable positions, returned members of the armed forces who desire their jobs back. The text of the Selective Training and Service Act of 1940 provides (Sec. 8) that a previously employed (except in a temporary position) honorably discharged veteran "still qualified to perform the duties of such position" who makes a reemployment application within 40 days shall be reemployed.



employed in "such position or to a position of like seniority, status, and pay unless the employer's circumstances have so changed as to make it impossible or unreasonable to do so." But three special problems exist: (1) many do not want their former jobs back (the office boy who became a captain); (2) many members of the armed forces have never been employed; (3) many returning veterans need special training either for new jobs or to make adjustments to their old jobs. A special phase is the need for training and rehabilitation of handicapped workers.

Employers have a special obligation to adjust former employees to positions suitable to their improved experience and responsibility.

The training and rehabilitation programs impose special opportunities and obligations upon the government, employers, and unions.

The reemployment of former employees faces an additional obstacle—union rules. These are found in new closed-shop and "union-maintenance" contracts made since the war started, and in seniority rules. The former employee, under the law, is entitled to his former place, regardless of any such rules, but conflicts have arisen.

A different type of problem is presented by the case of veterans not formerly employed. The unions contend that nonveterans employed during the war on war work deserve as much chance for postwar employment as do veterans not formerly employed. Some veteran organizations demand that no employment contracts or union rules shall stand in the way of veteran employment, and seek legislation or rulings to that end. This demand is supported by many employers. From the economic point of view the employer should be able to hire the most able workers he can find, with no arbitrary obstacle placed in the way of employment for competent veterans.

#### EMPLOYMENT OF WOMEN

Thousands of women were added to employment mills during the war. Although a large number have left industrial employment since the war, it is probable that there will be a larger percentage of women in the postwar labor force" than in prewar years.

*employed; many need special training; and union rules as to seniority and other matters may conflict with preference of veterans.*

*Many women who entered industry during the war will*

*remain. Since women can do most of the jobs done by men, arbitrary discrimination against employment of them violates the principle of hiring and using the most capable workers for productive efficiency.*

The employment of women creates many special problems. The problem of "equal pay" has been previously reviewed. We may make these additional observations:

1. Women can satisfactorily fill all or most of the jobs performed by men, subject only to the limitations of strength and physical requirement.
2. Sound employment and personnel practices are applicable to both men and women, and no emphasis should be placed on any distinctions between them as workers.

It may be anticipated that if there is a rise in unemployment there will be a revival of the agitation of the thirties to bar married women from employment. From the standpoint of economics and of productive efficiency it may be stated that it is not the business or proper function of the employer to determine whether any work applicable to a present employee, male or female, does or does not need a job. Establishment by either unions or employers of arbitrary rules barring married women as such from employment is a violation of the principle that productive efficiency should be aided by employment, promotion, and retention of the most capable workers available.

### SUPERVISORY RELATIONS

*In supervisory relations, new problems have been raised by responsibility of employers for foremen's actions under the Wagner Act and by efforts to organize foremen into unions.*

The problem of supervisory relations in industry has always been important, but the importance has become more evident in recent years, because of

- (a) the fact that under the Wagner Act the employer has frequently been held responsible for actions and statements of foremen;
- (b) attempts to establish collective bargaining "unions" of foremen; and
- (c) the difficulty of obtaining an adequate number of competent foremen to handle a vastly increased number of industrial workers.

Among the factors in the background of these developments we find in some cases, enough to be important, these conditions:

1. Additional supervisory responsibility has not been accompanied by adequate employer recognition of such extra responsibility.
2. The foreman has been talked of by the employer as a "representative of management," but he has not been fully and adequately treated as such.
3. The foreman, largely because of overtime pay during the defense and war periods, has obtained less weekly pay than some workers under his supervision.
4. Conflicting decisions by the National Labor Relations Board upon the right of foremen to organize and to affiliate with "rank-and-file" unions, together with legislation proposed in Congress to forbid such affiliation.

*Foremen's supervisory responsibility has not always been properly recognized, in pay or status.*

Actually, of course, the foreman is a management representative, and as such he cannot consistently be a member of the same union as the workers under his supervision, or of any union affiliated with such a union.

Although some of the wartime burden upon the foreman has disappeared with the end of the war, new problems are added. He has a special obligation in the employment and reemployment of veterans. If he can help smooth the veteran's adjustment period, he makes a real contribution to future industrial harmony and productive efficiency. Special effort should be made to make sure that the foreman can deal soundly and wisely with the problems of the able-bodied, the physically handicapped, and those who still suffer from the effects of nerve-shattering experiences. The veteran-employment policy of the company should be fully explained to every member of the supervisory staff, and they should be trained in the best means of making the program effective.

The general principles which should govern the relationships between an employer and supervisors are as follows:

1. All persons who represent executive management dealing with employees should be considered and treated as a part of supervisory management, and in such a way that their relation to management will be clearly apparent throughout the company.

*The general principles governing relations between*



*employers and supervisors include full recognition of status of foremen as a part of management, emphasis of their importance, increase of their prestige, and consultation of them in regard to company policies.*

2. Executive management should provide evidence of the importance in which it holds the foreman and his functions; the prestige of the foreman and his job should be so established and maintained that production workers will regard him as management's representative.

3. The authority and prestige of foremen should not be impaired by having any executive management members or any productive employees by-pass them without their knowledge.

4. The foreman should be paid on a salaried basis and accorded the same privileges as to vacations, sick leaves, and other benefits as are granted to other salaried employees.

5. The foreman should normally receive a fixed differential pay above that of those whose work he directs and supervises; in abnormal periods of a lengthened work week, with overtime pay, the foreman's pay should be adjusted as to be higher than that of those whose work he directs and supervises.

6. Foremen should be given authority consistent with their responsibilities.

7. The foreman should have the right to disapprove applicants for employment whose work he will supervise when such applications are presented to him by the employment department of the company.

8. Foremen should be given the authority to make recommendations for the promotion and demotion of employees under their supervision.

9. Management should regularly review and weigh the performance of foremen, including their record in production and their development of workers qualified for advancement.

10. The foreman should normally be the first, but not the final, contact for workers who have grievances they wish to discuss.

11. When it is necessary for executive management to reverse the decisions of a foreman, this should be done wherever possible by encouraging the supervisor to make the reversal himself, thus maintaining his prestige.

12. Provision should exist to bring foremen into contact with top management as often as possible, on both formal and an informal basis.

13. Top management should seek the observations and suggestions of the foremen upon production, personnel, and operating problems.

14. Foremen should be thoroughly informed, as far in advance as possible, of decisions by executive management which affect employment and production problems, and of top management's views on problems of labor relations, taxes, and existing and potential legislation affecting the company, its business outlooks, and its local community relations.

### INDUSTRY-WIDE COLLECTIVE BARGAINING

For many years the union in each major British industry has made an agreement with the employers' association in the industry, the agreement covering wages and other important employment conditions for all workers and firms in the industry. The same practice has prevailed in Sweden, with the agreements being legally enforced.

In recent years there has been increasing discussion, intensified during the war, of the possibility of establishing such industry-wide collective bargaining in the United States. Union demands for such action have been made in the steel and automotive industries.

For many years this method of bargaining has been used in some manufacturing industries, notably the pottery, elevator, and stove industries. This method has also been used in railroads and anthracite coal mining. The NRA codes incorporated in their labor aspects some of the features of industry-wide collective bargaining.

The following arguments in behalf of industry-wide collective bargaining agreements have been advanced (Prof. David McCabe of Princeton University in *American Economic Review*, March 1943 Supplement):

1. Elimination of geographical wage or plant differentials is possible, or they may at best be controlled by the "industry-wide joint conference."
2. Protection is given employers "against competition based on lower wages for the same operations."
3. "If the workers in the industry overwhelmingly want collective bargaining, the employer's fear of

*Industry-wide collective bargaining, common in Britain and Sweden, has been practiced here in some industries.*

*Advantages claimed include removal of geographical wage differentials, equalization of bargaining power, and publicity.*

having to face strong nonunion competition 'bound hand and foot by union restrictions' would also be gone."

4. "Where competition is brisk and labor cost a comparatively large part of the cost of production, employers should be glad to get industry-wide bargaining; otherwise they would have to fight a strong national union in isolated, individual-employer bargaining."

5. "From an extension of industry-wide agreements, one result is likely to be a synchronization of advances or decreases in wages throughout the industry. This should reduce the friction involved in changes in the money wage level. . . . The disturbance in market conditions in the industry is also likely to be less."

6. National officers of unions "usually take a more farsighted view . . . than local leaders" toward technological change.

7. "There is more of the goldfish bowl about industry-wide bargaining. Public concern as to what is going on is likely to lead to consideration of public opinion even of the prospect of governmental intervention, if not of the public interest directly for its own sake."

Despite these arguments we believe that for many reasons it would not be feasible or desirable to establish industry-wide collective bargaining throughout all important United States industries.

1. Sweden and England do not have the geographical coverage, labor groupings, type of competition, and variety of interests prevailing in the United States. In the United States much wider differentials frequently exist in production costs between major units or sections of the same industry.

2. The system would tend to create—or at least intensify—the problem of "big labor" and "big business"—and to create continuing demand for rigid government control of both business and labor.

3. The system would tend to establish on a huge scale the "collusive agreement" between labor and business—fixing costs which would satisfy both parties in the belief that they could be passed on to the public in high prices.

4. Advocates of industry-wide agreements admit

*Disadvantages for U.S. are that conditions are too varied here; that the conflicts of "big labor" and "big business" would lead to rigid government control; that technical innovations and other improvements would be retarded;*



the existence of some "danger" that such agreements would "retard the introduction of laborsaving devices and tend to get advances in wages out of price advances rather than through the reduction of costs"; and, "as between industry-wide and local bargaining in an industry producing for a national market, there may be more slowing down of technological innovations under the former system. There may be a joining of union fears with fears on the part of employers (as competitors) of this new thing with the result of hamstringing it by restrictions or by the refusal of a reasonable wage-rate readjustment for its use" (McCabe).

5. There is no assurance that an agreement made for an entire industry might not bring costs which would drive some companies out of business.

6. Collective bargaining will be most successful when the individual employer puts in enough effort to obtain an agreement reasonably well suited to the conditions and problems of the particular company.

7. An industry-wide strike would be far more menacing to the public welfare than a strike in a single company. We have such examples of this in 1946. National paralysis resulting from a few industry-wide strikes in major industries would probably lead to the suppression of freedom by forbidding strikes and imposing upon both employers and employees compulsory arbitration.

8. If a union obtains the closed shop on a national basis, its monopoly over employment in the industry is made secure and no citizen could earn a living in the industry without union permission.

9. There is a possibility that industry-wide collective bargaining would enable strong companies within an industry to dominate the whole industry to their own advantage.

10. In a private enterprise system, the essential element to preserve is the individual enterprise—including the right of the individual worker to choose any vocation and to decide for himself whether he wants to belong to a union, and that of individual businessmen to start a corner grocery or join with others in starting a machine shop. It is not industry as a whole. When labor is thought

*that local employer-employee relations would be impaired; that industry-wide strikes would be paralyzing to economic life; and that individual enterprise would be weakened.*

of as an industry-wide aggregation and industry is regarded as an aggregate of all its units, then we break down the preliminary unit which is essential for the preservation of private enterprise.

It will be observed that the results of steps 3, 5, 8, 9, and 10 above would all be in the direction of creating or maintaining monopoly and the suppression or reduction of competition. Many of the proposals and experiments in labor relations which appeal to some organized labor groups, some employers, and some theorists lose their superficial attractiveness, and become repulsive when they are viewed from the standpoint of the welfare of consumers, the public as a whole, instead of the welfare of particular producer groups, who constitute only a part of the whole public.

#### LABOR PARTICIPATION IN MANAGEMENT

*Labor participation in management, if taking the form of cooperation in seeking ways and means to increase and improve production, may be useful.*

Labor-management cooperation in employment relations matters is thoroughly desirable, bearing always in mind that, as previously stated in principle 20 of sound employment relations, "responsibility of management for the execution of work must be accompanied by authority to control and direct the means for doing the work, within the bounds of professional standards and legal requirements of safety."

Properly conceived and operated, "labor-management cooperation," as developed especially in many plant joint management-labor committees during the war, can deal with the discovery and application of ways and means for securing increased and better production. Collective bargaining, on the other hand, deals with problems of wages, hours, and working conditions.

While dealing with "the means for doing the work," the joint production-committees established during the war have not, with a few exceptions, attempted to act in any but an advisory capacity; that is, they have not attempted to take over the managerial authority and responsibility for final decision and control.

Some union leaders have proposed that these advisory committees be given definite powers—not only of

“means for doing the work,” but also over such matters as nature of products, sales policies, prices, location of plants, and decision to abandon or reduce working forces. The so-called Reuther plan, for example, proposed that full authority to organize and direct the nation-wide production of airplanes be given to a joint management-labor council. The so-called Murray industrial council plan called for application of this idea in all major industries. It seems fairly sure that the idea of labor diversion to the general problem of industrial administration and management will persist in some form.

With reference to the basic idea involved we present the following observations:

1. There has been a tendency over many years to limit employers' power—by restricting authority to fire men for any cause, including union activity, and by grievance committees and works councils to settle conflicts and difficulties arising in plant operations. These matters have all, however, been in the direct employment relations field.

2. The major issue is over proposals that the unions should take over control or have an equal voice in those aspects of management which do not directly affect the means for doing the work.”

3. Although there has been a trend toward labor participation or collaboration with management in matters directly affecting employment conditions, there is no convincing evidence that there has been a trend toward labor demands to have a part in management as management. There is a long gap between the Plumb plan of 1920 and the Murray-Reuther plan of 1944. There is some reason to believe that the Murray-Reuther proposals are purely opportunistic, designed to convince union members of the alertness of its top leadership during the war period.

4. Promptness in making important decisions is frequently necessary and will be severely disturbed if management must consult with labor or other groups prior to the making of any decision. Either an equal voice or a veto power would delay decisions and create confusion.

5. Any such setup would tend to promote rigidity

*But limits should be recognized in order that managerial authority and responsibility for final decision and control be not impaired.*



and to lessen competition. Rigidity is the destroyer of progress.

6. There would be danger that the union could seek to transform its suggestions into demands, by threatening to strike to compel their acceptance.

7. If management representatives make wrong decisions, they can be removed; if the union representative in a joint industrial council made a faulty decision, they would not be fired.

## FULL EMPLOYMENT

***"Full employment" is difficult to define.***

***We may say we have it when we do not have an unusually large number of persons out of work and seeking jobs.***

***A certain amount of unemployment is inevitable and desirable in a free society where mobility and adventure promote progress.***

Many people say that there must be "full employment." Unfortunately the term cannot be accurately defined. Does it mean that there is a lower age limit of fifteen, sixteen, eighteen, or twenty-one? Does it mean that no one over sixty-five will be employed? Does it mean 20, 30, 40, or 50 hours of work a week? (In the section on Hours of Labor, we showed that efforts to provide "full employment" by arbitrary reductions of the work week are fallacious.) Does it mean employment at some fixed wage, or at whatever one can get on a free market? Does it mean that everyone wanting a job will be employed—even if he ought to be in school? Does it mean that several million women employed during the war should stay in industry or leave it? Perhaps the best answer is to say that we have "full employment" when we do not have an unusually large number of persons out of work and looking for jobs.

It should, moreover, be realized that while a large volume of unemployment is always bad at the time for the community or nation in which it occurs, and for the individuals directly involved, nevertheless, considering the long-run welfare of society as a whole, the existence of some unemployment has in the past century actually tended to make people think, plan, venture, move to new locations, and therefore as a result to reduce unemployment, to provide new jobs, and promote progress and national welfare. Furthermore, talk of "full employment" at all times ignores the fact that some people lose jobs as a result of failure of a competitive enterprise, that some

people are ill, that new people who leave school come into the labor market and cannot immediately find jobs, that malingerers will be unemployed when the employer locates them and can discharge them, that when people become too old to work effectively but do not realize it they must retire.

This does not mean that any large amount of unemployment of those able and willing to work is economically desirable. Society loses if they are not employed producing goods and services. Any such large number unemployed is not necessary and will not occur if the commendations set forth elsewhere in this book are followed. On the other hand, a high level of employment will promote national progress only when, wherever possible, individual reward is related to performance. Emphasis on work for work's sake may ignore that the *results* of the work are still more important.

The major economic aspects of full employment may be summarized as follows:

1. Most of the plans for "full employment" involve vast public expenditures (on the fallacy of such an approach see Chap. XVIII) and bureaucratic control over the citizen. Thus the British *White Paper on Employment Policy*, issued May 26, 1944, proposes government stabilization of prices, regulation of the flow and direction of private capital investment, control over the volume of labor to be used, control over the goods to be manufactured, control over the location of industry. In short, centralized "economic planning" by government would be substituted for competition, and economic freedom—of consumers, investors, employers, and workers alike—would be lost or put in the process of being lost. Freedom of the choice of work is incompatible with full employment as the "economic planners" look at it. Freedom of consumers to buy what and how much they want is likewise inconsistent with the planners' idea of full employment. They cannot succeed unless they socialize demand.

2. "Full employment" in a literal sense might not be possible unless the government had authority to compel people to move from one location to another, from one industry to another, and from one trade to another. In

*The major aspects of "full employment" may be summarized:*

*1-2. Central planning cannot succeed in removing all unemployment unless it takes away freedom of choice from consumers, investors, and employers; also from workers, as to kind and place of work.*

short, full employment is not possible if economic dislocations exist, and these cannot be completely eliminated except under compulsion by an all-powerful (and also a wise) government.

**3. Productive efficiency cannot be maintained without authority to dismiss inefficient workers.**

3. In the absence of widespread use of wage systems which relate individual reward to performance, it is difficult to have real productive efficiency and to maintain discipline or order unless there exists the ability freely to dismiss incompetents and malingerers. In the past this has unfortunately been most effective when desirable new jobs have been somewhat difficult to obtain. This need not be necessary in the future if we adopt general use of wage systems relating reward to accomplishment.

**4. If government spending is relied on, then private employment will decline progressively.**

4. If "full employment" is sought as a result of government spending, possibly involving a government "guarantee" of jobs, the chance of private employment is further reduced, more government spending will seem necessary, and there is danger of the destruction of private enterprise, and of severe inflation with damage to all, a danger which we have discussed elsewhere.

**5. Government control of wages and prices would be necessary, creating more maladjustments or checking progress.**

5. "Full employment" is possible only if the government prevents the determination of wages by collective bargaining, since such determination might result in increased costs in one industry which would reduce its sales and hence its production and employment. The government would have to take steps to control rigidly both wages and prices in order to prevent the slightest economic maladjustments. Actually, however, such government efforts would either create maladjustments or preserve order and balance at the expense of progress and high living standards.

**6. Requisites for progress would be sacrificed.**

6. Society loses if to secure "full employment" it abandons the conditions necessary for a progressive national economy: increasing productivity per man-hour, rising real wages, technical progress.

**7. Government should not repress incentives to provide work and then have to furnish jobs.**

7. The sound procedure for securing "full employment" lies in the observance of sound economic principles by labor, management, and government (see Chap. XV). Government, for example, can do more to provide a high level of employment by maintaining a climate in which present and prospective private employers have an incentive to offer work to others than it can by repressing



industry and then seeking to furnish jobs it says private industry is unable to give.

8. Trade-union rules restricting apprentices and curtailing output are obstacles to securing full production and an economically sound high level of employment. "Neither full employment nor social security is attainable without a much greater degree of flexibility, mobility, and adaptability on the part of Labour than the Unions have been led to concede" (*London Times*, Oct. 5, 1944).

9. The accomplishment of peacetime "full employment" in private industry can be prevented if workers are priced out of the market for their services. This might happen as a result of government efforts directly or indirectly to fix wages or hold them at uneconomic levels, or as a result of the success of trade-unions, with or without employers' collaboration, in setting or holding wages at uneconomic levels. The general council of the British Trades Union Congress has already said that it will not accept "full employment" if it means work at less than trade-union rates" (*London Times*, Oct. 3, 1944).

10. Nonemployment of labor results when capital is not employed. "Between 1904 and 1937 the largest increases in both jobs and output occurred in the major groups of manufacturing industries whose fixed assets, in terms of net book values, grew most rapidly" (Fabricant, *Employment in Manufacturing, 1899-1939*, National Bureau of Economic Research, 1942, p. 159). The incentives and conditions requisite to permit "full employment" of capital, and resulting in "full employment" of labor, are set forth in other chapters of this book.<sup>1</sup>

**8. Union rules restricting apprentices and curtailing output do not promote employment.**

**9. Nor do efforts to raise or hold wages to uneconomic levels, pricing labor out of the market.**

**10. Nor do hindrances to employment of capital.**

<sup>1</sup> The Employment Act of 1946 declared that "it is the continuing policy and responsibility of the federal government to use all practicable means . . . to create and utilize all its plans, functions, and resources for the purpose of increasing and maintaining, in a manner calculated to foster and promote free competitive enterprise and the general welfare, conditions under which there will be abundant useful employment opportunities, including self-employment, for those able, willing, and seeking to work, and to promote maximum employment, production, and purchasing power." A three-member Council of Economic Advisors to the President was set up, with an annual appropriation of \$345,000 authorized to employ a staff to appraise various economic programs and to develop and recommend appropriate economic policies. It is to report actual levels of employment, production, and purchasing power, current and foreseeable trends, and a program for maximum employment, production, and purchasing power. A joint Congressional committee is provided for, to receive and consider these reports transmitted by the President, with proposals for legislation as "the President may deem necessary or desirable."

## VI. CONCLUSION

*Labor relations are but one part of the whole economic picture, and are complicated by the mixture of economic, physiological, and psychological factors.*

Labor relations comprise but one part of the entire economic picture.

The labor relationship is one of the most complicated subjects in the field of economics, since properly to appraise it we must mix economic factors with the psychology and physiology of the workers. "The most delicate instruments employed in production are the human instruments" (B. S. Rowntree, *London Times*, July 1944). Employment must be considered as more than just a means of life for the worker—it is a part of life itself, since many hours of every day are spent in the factory, mine, store, or office.

Since the worker's life goes into business, consideration of him should go beyond the dollar value of his pay. O. M. Trevelyan, dean of English historians, says well (*English Social Theory*, 1944) that "the purchasing power of wages is not the whole of human happiness." Making a living and living itself enter into the complete personality of each gainfully employed person.

The mental atmosphere, material environment, and relationship with fellow workers and supervisors become vital parts of the lives of the workers and should not be overlooked by either employers or economists. Work must be regarded by all as both dignified and honorable if we are to have personal satisfaction and national advancement.

Labor relations should be so organized and conducted as to promote the welfare of the entire public.

Some individuals are stockholders, some are employees, all are consumers. When either industrial stockholders or industrial employees seek to promote their own interests without full consideration of the public as consumer, then the welfare of the individual members of the public as producers and workers is impaired.

Since the worker is an individual, he must, if he is to do his best, be treated as such in the sense that he is not dealt with as one of a "mass"; many employers have made that mistake in the past. Most labor unions are now treating the worker's services as a commodity or proper price which they can dispose of on terms and in such manner as the union leaders consider best.

*If workers are to do their best, they must be treated as individuals.*

In dealing with individual workers it is important for the employer to realize that from their standpoint minor grievances are real. They tend to fester, to become sore spots, to cause discontent and unrest, to lead to reduced output and increased costs. Every effort should be made to locate grievances as soon as they arise and to deal with them promptly.

Since individual workers differ in capacity and accomplishment, they should be rewarded differently. In fact, the union which insists that workers be paid only on a straight-time basis and any employer who refuses to install an incentive wage system where it would be practicable are both reducing total output and reducing the average scale of living throughout the nation. It seems clear that from the standpoint of both unions and employers, and particularly of consumers, we need much more study and knowledge of the practical problems involved in setting base rates under incentive pay methods, in measurement of productivity, and in development of formulas for the division of the benefits of increased productivity.

The industrial employer in dealing with employees usually represented by foremen and other supervisors; he should treat them as a part of management, so that they can properly interpret and understandingly apply company policies.

There is a natural tendency for people to belong to clubs, fraternities, and lodges of all kinds; there is nothing psychologically strange in the desire of many workers to associate with other workers in a labor association. Their right to do so should be recognized and protected, but so should the right of any worker not to join a union, to stay out of work and not to strike, if that is his choice. A labor union which makes union membership a condition of employment is practicing compulsion and has automatically lost its democratic character.

From the economic standpoint, there is nothing inherently good or bad in a labor association or union. It is conceivable that a labor association could impose such high standards of membership, admitting only those who are qualified, that its members could command a premium for working; that it could cooperate with employers in establishing incentive wage systems; that it could have

*As individuals, they must be rewarded differently, and incentive wage systems are desirable.*

*More study of practical problems related to incentive pay is clearly needed.*

*The right to associate, to organize unions, to join or not to join them, should be protected.*

*Unions that would maintain high standards, help in incentive wage plans, suggest better*



*ways of operation, and insist on strict observance of contracts would be economically constructive.*

*Living scales of the people can rise only with productive efficiency.*

*We can provide social-security benefits only out of surplus production, and meet other economic challenges only with increased productivity.*

as one aim the suggestion to employers of better ways of operation; and that it could insist on a strict observance of contracts by its members. Such a type of union would be economically constructive. But it is difficult to point to very many unions in the United States which approximate such ideals.

Instead, the more common types of union organizations in this nation deny any right of regulation in the public interest; they for the most part repudiate the idea of incentive pay; they seek a monopoly of labor supply.

Such policies are against the public interest, since they result in lowered productive efficiency.

We cannot continue to provide higher living scales for the people of the United States if production efficiency is lowered. Living standards cannot rise as much as they otherwise would if productive efficiency is arbitrarily curbed. Social security benefits of all kinds can be neither maintained nor extended if as a nation we do not produce a surplus of wealth out of which they can be paid. Higher wages and shorter hours for workers cannot come unless productive efficiency is increased. If productive efficiency is arbitrarily curbed by union output-limitation rules and practices, we cannot compete for export trade with Russian production, free from such limitations. It is only from the production of our farms, mines, and factories that the extra social commitments and economic challenges of the postwar years can be met. Those who speak of the need for greater productive efficiency are not speaking of concrete engineering facts; they are speaking of the ways and means for satisfying human needs and wants.

The very practical need of increased productivity was thus set forth by Prime Minister Attlee, Mar. 3, 194

We want more houses, clothes, household goods, coal, machinery—in fact, every kind of thing. There is only one way to get these things. That is by work. . . . What we want is to use labor intelligently and for every one to give a full output. . . . It is only by greater production increasing the wealth of the nation that we shall be able to reduce taxation. . . . The same need for economy of labor and for greater work applies equally to distribution and to office work.

These sound and sensible observations are equally applicable to the United States. Vice-president Woll of 1

.F.L. has very wisely said (address to National Postwar Conference, Mar. 15, 1946):

In the years immediately ahead, there will be a world demand for our products that will keep most facilities operating to capacity. The indispensable condition of return to normal production is no interruption of production. That is why good labor relations is a basic asset.

One of the problems of democracy is to prevent any private organization from being able to enforce its will and demands upon the whole of society. It follows that in a democracy no private organization can be greater than the State or can be allowed to defy it successfully. The Government of the United States should represent the whole people; it should regulate every concentration of power which can threaten the welfare of the entire people and this nation's structure of representative government.

If we are to obtain full productive efficiency, it must be recognized that more production brings higher living standards, and that employees and employers alike have a common interest in more and better production. We have amply demonstrated in our history the advantage we have developed in productive efficiency.

We have in this nation another advantage which exists here to a greater extent than in any other nation: fluidity of movement from one economic group to another, and absence of rigid stratification into economic classes from which movement is virtually impossible.

As a result, the tendency of industrial progress in the United States has been to bring about higher and higher standards of living. Each succeeding generation can raise or lower the national standard of living which it may enjoy and which its children will inherit. Americans should consider realistically whether economic policies, practices, and proposals will increase or lessen the productive efficiency upon which national economic progress and individual welfare depend, and should support those which will raise productive efficiency.

Finally, we shall not have productive efficiency and maximum welfare for the consuming public as a whole unless labor relations are carried on by both employees and employers in an atmosphere of recognition that the American Individual Enterprise System is going to endure;

*No private organization can be allowed to enforce its will upon the whole of society.*

*We have here great advantages in our productive efficiency and our fluidity of economic groupings, which have continually raised standards of living.*

*We should favor economic policies that will increase this productive efficiency.*

*Management and labor working together to this*

*end can thus  
best serve their  
own interest  
and the gen-  
eral welfare.*

that it is the best system for America; and that management and labor in American industry, working together within this system, can each secure its own best interest as producers, but only through working for the benefit of the entire public.



## APPENDIX

## HISTORY OF INDUSTRIAL WAGES

The U.S. Bureau of Labor Statistics presents (*Monthly Labor Review*, February 1928, 120) an interesting table of wages per hour (exclusive of agricultural workers) from 1840 to 1926 (see Table 7).

TABLE 7

(Currency basis during Civil War period. 1913=100)

Year	Index number	Year	Index number	Year	Index number	Year	Index number
1840	33	1862	41	1884	64	1906	85
1841	34	1863	44	1885	64	1907	89
1842	33	1864	50	1886	64	1908	89
1843	33	1865	58	1887	67	1909	90
1844	32	1866	61	1888	67	1910	93
1845	33	1867	63	1889	68	1911	95
1846	34	1868	65	1890	69	1912	97
1847	34	1869	66	1891	69	1913	100
1848	35	1870	67	1892	69	1914	102
1849	36	1871	68	1893	69	1915	103
1850	35	1872	69	1894	67	1916	111
1851	34	1873	69	1895	68	1917	128
1852	35	1874	67	1896	69	1918	162
1853	35	1875	67	1897	69	1919	184
1854	37	1876	64	1898	69	1920	234
1855	38	1877	61	1899	70	1921	218
1856	39	1878	60	1900	73	1922	208
1857	40	1879	59	1901	74	1923	217
1858	39	1880	60	1902	77	1924	223
1859	39	1881	62	1903	80	1925	226
1860	39	1882	63	1904	80	1926	229
1861	40	1883	64	1905	82		

Carl Snyder, former president of the American Statistical Association, has compiled a weighted index of wages from 1875-1925, using 1913 as the base, factory labor being given a weight of 40, unskilled labor 40, and teachers and clerks 20 (*Business Cycles and Business Measurements*, p. 289). The figures for each 5 years beginning with 1875, compared with the Bureau of Labor figures, are shown in Table 8.

In view of the nature of the subject, probable differences in basic data, and the fact that the Bureau of Labor figures probably did not include teachers and clerks, the variations are certainly not large between the Snyder and the Bureau of Labor figures. The Snyder figures probably portray most accurately the general wage and salary trend in the entire community; the

TABLE 8

Year	Bureau of Labor	Snyder	Snyder variation, per cent
1875	67	69	+ 3
1880	60	69	+15
1885	64	74	+16
1890	69	75	+ 9
1895	68	75	+10
1900	73	77	+ 5
1905	82	83	+ 1
1910	93	94	+ 1
1915	103	103	
1920	234	213	- 9
1925	226	214	- 5

Average variation . . . +4

Bureau of Labor figures portray best the movement of purely industrial wages, with which we are at this time most concerned.

Valuable as the Bureau of Labor figures are as indicating the general trend of industrial wages, they

- (1) take no account of reductions in the work day or week, or of any unusual unemployment situations, except as they may, if long continued, affect the wage rate;
- (2) make no differentiation between skilled and unskilled workers;
- (3) represent rates and not earnings;
- (4) give no consideration to the purchasing power of the wage received. (For reasons which appear in the section on Living Costs perhaps no reliable comparison or tabulation of "real" wages for such a long period is possible.)

### *Trend in Weekly Earnings, 1790-1939*

We submit here a compilation of the wages of carpenters, printers (compositors), skilled factory workers (machinists), and unskilled factory workers for the period 1790-1939, giving the money wages for each group, the index number for each year with 1913 as the base, the average wage by decades, and the relation of skilled factory wages to unskilled factory workers together with the yearly figures for each group.

Studies have been made of the weekly earnings of skilled factory workers (machinists), unskilled factory workers, carpenters, and printers (mostly book and job compositors) for the period 1790-1939 (printers' figures begin with 1840). The yearly figures, indexes, and explanatory notes are presented in the latter part of this appendix.

The figures most comparable are those of earnings by decades, thus tending to neutralize errors in figures for any specific years. Wages are given in currency figures, no adjustment to a gold basis being made for periods of depreciated currency. (Currency wage averages for the decade of 1870 can be reduced to a gold basis by using the factor 0.9199; from gold to currency use the factor 1.109.)

Figures of weekly earnings measure wage trends to a much better extent than tables of hourly rates and seem to present a much better idea of the trend of money incomes. (Cf. Dr. Hansen, *American Economic Review*, March 1925, p. 29; use of weekly tables in Burgess, *Trends of School Costs*, pp. 69-72; National Industrial Conference Board, *Wages and Hours in American Industry* 1925, p. 23. The National Industrial Conference Board in *Research Report* No. 20, p. 2, declares, "Weekly earnings, if carefully prepared, however, are . . . more useful than either hourly rates or hourly earnings in studying the income conditions of the worker.")

TABLE 9. — WEEKLY EARNINGS BY DECADES

Decade beginning	Carpenters	Printers	Skilled factory workers	Unskilled factory workers
1790	\$3.69	.....	\$4.26	\$3.37
1800	5.61	.....	6.47	4.86
1810	6.02	.....	6.94	5.72
1820	5.72	.....	6.60	4.63
1830	7.49	.....	8.65	5.10
1840	8.15	\$10.28	8.59	4.95
1850	9.22	11.05	9.57	5.92
1860	13.58	14.82	13.49	8.24
1870	15.51	17.05	14.87	9.30
1880	14.64	16.07	13.95	8.93
1890	15.21	16.04	13.78	8.72
1900	21.41	17.78	15.52	9.77
1910	26.65	25.41	22.72	13.69
1920	51.20	46.87	35.10	23.10
1930	52.32	43.83	28.56	18.78

NOTES: 1. It is doubtful that figures before 1840 in tables in this chapter are as reliable as the later figures.

2. The wages for "skilled factory workers" include only those of machinists.

### Relation of Skilled and Unskilled

The average percentage by which money earnings of skilled factory workers exceed those of unskilled factory workers has been as shown in Table 10.

TABLE 10

Decade beginning	Excess, per cent	Decade beginning	Excess, per cent
1790	28	1870	59
1800	37	1880	56
1810	19	1890	58
1820	47	1900	59
1830	72	1910	68
1840	74	1920	52
1850	61	1930	52
1860	64		



## Unionization and Wages

On the basis of the information in the present appendix the following observations are possible:

1. Table 9 does not take into account the unemployment which exists in different occupations. Building trade workers, for example, suffer to a greater extent than most others from the effects of unseasonable weather. Thus union figures from 18 cities show that carpenters are out of work an average of 23.5 per cent of the year (*Seasonal Operation in the Construction Industries*, a report of the Harding Conference on Unemployment, p. 39). Assuming that this figure accurately represents the average amount of unemployment among carpenters during a year, it is at once clear that if an entire year is considered the average weekly earnings are only 76.5 per cent of those in the table.

The average amount of unemployment among factory workers has been determined in the following manner: Five manufacturing census investigations before the 1929 depression gave the average number of wage earners in foundries and machine shops throughout the entire year; from the Bureau of the Census was secured the number employed on the middle of the maximum month. It has been assumed that the latter figure represents the total of those seeking to earn a livelihood in the industry, and that the difference between this figure and the average employed throughout the year reveals the average number unemployed. The census figures are shown in Table 11.

TABLE 11

Census year	Wage earners	
	Average number	Maximum month
1925	397,838	412,947
1923	448,777	470,328
1921	321,363	384,084
1919	482,767	530,438
1914	362,471	384,214
Total . . . . .	2,013,216	2,182,011

The difference is 168,795 or 7.7 per cent of the maximum figure, indicating that average proportion out of employment during a year. We have arbitrarily assumed that skilled workers in the group are unemployed 1 per cent less and unskilled workers 1 per cent more than this amount, making the effective weekly wage of the skilled factory worker 93.3 per cent of the nominal, and that of the unskilled 91.3 per cent of the nominal. Applying this basis for the two decades 1910 and 1920, which include the five census years noted, we find that in the decade beginning 1910, when the Carpenters' Union probably possessed its greatest strength the effective weekly wage (adjusted on above basis for unemployment) was less than that of skilled factory workers — \$20.23 for carpenters and \$21.20 for machinists.

2. It is true that in the decade beginning 1920 effective weekly wages of carpenters made an enormous jump (to \$39.17 as compared with \$32.50 for skilled factory workers). But it is impossible to attribute all of this to the effect of the closed shop, for these reasons:

- (a) An enormous building shortage was being met, resulting in an extraordinary demand for the services of skilled workers in every building craft; there was no corresponding general increase in the demand for the services of machinists.
- (b) During this period of great increase in wages of carpenters there was a great increase in the amount of building throughout the country under open-shop conditions — reaching 40 per cent of the total in 1924 and 1925.

Considering these two factors it is clear that we cannot determine what, if any, proportion of the increase in carpenters' earnings during this period is traceable to the closed shop.

3. The Carpenters' Union was organized in 1881; the Typographical Union had been formed in 1850 (Commons, *History of Labor in the United States*, Vol. II, p. 313). The Carpenters' Union first began to be tolerated by employers about 1885 (*ibid.*, p. 375), becoming the largest union in the American Federation of Labor by 1890 (*ibid.*, p. 476) and being extremely powerful from 1890-1920. Although various local printers' unions had been organized after 1800, an attempt to form a national union in 1836 lasted only two years (*ibid.*, Vol. I, p. 452), and collective bargaining in the industry did not really exist until 1853 (*ibid.*, p. 404). Apparently the International Typographical Union became a very real factor in the industry by 1870.

Now it is obvious from Table 9 that printers' wages have considerably exceeded those of skilled factory labor. But the importance of this comparison, as far as any effect of unionization exists, disappears when we realize that the weekly wages for the two classes of labor in early years were as shown in Table 12. (See also subsequent sections of this appendix, with adjustments made for the unemployment factor, estimated at 6.7 per cent for the skilled factory workers and using the same basis as above at 4 per cent for printers.)

TABLE 12

Year	Compositors	Machinists
1815	\$6.51	\$5.11
1825	7.20	6.72
1835	8.47	6.55
1845	9.50	7.73
1855	10.55	9.05
Average.....	\$8.45	\$7.03

Compositors' wages, during a period when organization was comparatively ineffective in influencing wages, averaged 20.2 per cent higher than those of machinists (owing, perhaps, to somewhat higher degree of intelligence required).

Yet from 1870-1920, fifty years during which the Typographical Union was a powerful factor in the industry and factory machinists were on the whole little affected by union organization, the effective wages of compositors averaged 17.6 per cent more than those of machinists.

#### Compositors' Wages Higher than Machinists'

Before union was powerful.....	20.2%
After union was powerful.....	17.6%

## COST OF LIVING AND REAL WAGES

An attempt was made to trace the cost of living and real wages since 1790, but was partly abandoned in the belief that a table, even approximately correct, could not be devised for the most part with the information now available. Some of the reasons which caused this decision are:

1. The Commissioner of Labor Statistics believed that the cost-of-living figures (based on family budgets of 1918) used by the Bureau of Labor Statistics were entirely out of date (*Labor*, July 9, 1927; *Literary Digest*, Dec. 31, 1927).

2. The American Association for Labor Legislation, in a resolution adopted Dec. 29, 1927, declared that "a new survey of the cost of living is imperatively needed to bring these (U.S.) statistics up to date."

3. If cost-of-living indexes of 1928, based on 1918 studies, are out of date any indexes for previous decades will probably be even more unsound.

4. Cost-of-living indexes based on wholesale prices are not sufficiently reliable as a basis whereon to calculate real wages. Perhaps the best wholesale price index is that of Dr. Hansen but he admits that for a vital period, 1862-1871, his table "exaggerates the rise in the cost of living" (*American Economic Review*, March 1925, p. 30).

5. Long-term cost-of-living tables do not — perhaps cannot — take into account changes in the standard of living from one period to another, such as the change from candles to kerosene to gas to electricity. Thus the same index number for periods 30 years apart may really indicate a much higher living standard at the later date.

6. Nor can such long-term tables take into account such factors as the extent to which at any given period workers have small flocks of chickens, or gardens from which they obtain a large proportion of the family vegetables.

7. Since most cost-of-living figures are based on family budgets in any long-term table, consideration should be given to changes in the number of persons per family. The census figures reveal (*Fourteenth Census*, Vol. II, p. 1266; *Economic Almanac*, 1942-1943, p. 216) the number of persons to a family (figures for 1850 and 1860 for free population only) as shown in Table 13.

TABLE 13

1850	5.6	1900	4.7
1860	5.3	1910	4.5
1870	5.1	1920	4.2
1880	5.0	1930	4.0
1890	4.9	1940	3.8

8. Dr. R. G. Hurlin of the Russell Sage Foundation does not believe that his 10-food cost index for 1841-1920 (Burgess, *Trends of School Costs*, p. 54) is satisfactory as a cost-of-living index (letters from Dr. Hurlin, Apr. 14 and 20, 1927).

9. In addition to the fact that a budget based on family purchases is faulty because of constant shiftings in standards and consumption and because of changes in the size of the average family, it must be noted that, based on the 1920 census, the number of unmarried male workers was 7,800,000, and their purchases were not at all controlled by family budgets of



purchases (Douglas, *Wages and the Family*, p. 34). And, if family budgets are to be considered as the base, it should be noted that the average age of marriage among males is increasing, the figures from Massachusetts giving the figures shown in Table 14 (Massachusetts Registration Reports).

TABLE 14

Year	Age	Year	Age
1870	26.3	1890	27.2
1880	26.5	1925	27.7

However, a trend in real wages from 1899 can be obtained for manufacturing on the basis of material given by Paul Douglas and the National Industrial Conference Board. The actual wages were adjusted to obtain the real wages by using the Conference Board's cost-of-living index for the years from 1914 on. For the earlier years a cost-of-living index was computed by linking to the Conference Board's index the trend of Carl Snyder's general price index. Table 15 shows the resulting picture.

### CARPENTERS' WAGES, 1790-1939

(As shown in Table 16)

1. The figures for 1790-1825 are from the 1885 Report of Massachusetts Bureau of Labor Statistics, pp. 319, 320; the 1818 and 1821 figures were interpolated. The basic figures were multiplied by the factor 0.9048, this being the proportion of national wages of machinists in 17 plants for the years 1845-1850, as derived from Aldrich Report data, to the Massachusetts figures of machinists' wages for these years.

2. The figures for 1826-1839 are from the 1885 Report of Massachusetts Bureau of Labor Statistics, pp. 320, 434. It was necessary to take all these figures, from the 10-year averages given, except for 1835, 1837, and 1838, adjustment being made for these years. The yearly figures were also multiplied by the above factor 0.9048. This may tend to reduce the figures for the entire period 1790-1839 below the true national average. Daily wages during the entire period were multiplied by six to secure weekly wages.

3. The figures for 1840-1870 were secured from basic data in the Aldrich Report, running through 1878. From a group of seven employers we took the wages paid by the three whose data go furthest back: No. 7 in Connecticut, No. 19 in New York, and No. 28 in Pennsylvania. The daily wage for January of each year was multiplied by six and weighted by the number of men employed in each establishment. For 1840, 1841, and 1842 only Connecticut and Pennsylvania figures were obtainable; and for 1854, 1872, and 1873 only the New York and Pennsylvania figures. Beginning with 1853 the resulting figures were unquestionably higher than the true national average, since the New York employer had more workers than the other two combined and in all except 6 years paid higher wages than either of the others. The years 1854-1860 (before Civil War effects; figures for all three available each year and the New York wage highest each year) were taken and it was arbitrarily assumed that the number employed by the New York firm was the same as in the Pennsylvania (next largest) establishment. The result gave an average wage 0.921 times that when no such con-

TABLE 15.—REAL HOURLY AND WEEKLY EARNINGS—MANUFACTURING INDUSTRIES  
(Indexes—1899 = 100)

Year	Real hourly earnings	Real weekly earnings	Cost of living
1899	100.0	100.0	100.0
1900	100.8	100.6	102.5
1901	99.8	98.9	105.3
1902	99.8	98.2	109.1
1903	101.3	99.0	111.6
1904	101.3	98.7	111.6
1905	100.0	97.7	114.2
1906	100.3	97.3	118.2
1907	101.8	98.7	120.8
1908	101.3	97.2	118.2
1909	99.0	94.9	122.0
1910	98.5	94.5	126.0
1911	101.0	96.4	124.6
1912	101.0	95.6	129.9
1913	105.2	98.6	129.9
1914	105.7	98.7	129.9
1915	106.2	98.9	129.2
1916	111.1	102.7	138.6
1917	105.9	97.9	164.4
1918	107.5	97.4	199.6
1919	116.7	103.4	216.7
1920	126.8	109.3	250.4
1921	133.9	115.0	216.7
1922	133.2	115.3	206.4
1923	140.1	120.8	211.9
1924	141.9	120.9	214.6
1925	140.6	119.5	219.7
1926	140.1	119.2	221.0
1927	145.2	122.4	216.1
1928	148.1	125.3	213.1
1929	151.4	129.3	212.1
1930	156.6	121.2	204.9
1931	166.3	117.6	184.7
1932	164.3	99.3	165.0
1933	168.6	107.2	158.7
1934	187.7	114.6	168.2
1935	187.4	122.6	174.1
1936	189.2	131.5	178.2
1937	203.6	138.4	186.0
1938	214.7	129.3	181.6
1939	219.0	145.1	179.0

SOURCE: Paul A. Douglas, *Real Wages in the United States 1890-1926*, and National Industrial Conference Board, "Wages and Hours in 25 Manufacturing Industries" from 1926 to date. Cost-of-living data are from the Conference Board from 1914 to date; for prior years the trend of Carl Snyder's general price index was linked to the Conference Board's cost-of-living index.

TABLE 16.—CARPENTERS' WAGES 1790-1939  
(Base year, 1913)

Year	Weekly wage	Index	Year	Weekly wage	Index
1790	\$3.20	13	1830	6.41	26
1791	2.98	12	1831	7.60	31
1792	3.17	13	1832	7.60	31
1793	3.27	13	1833	7.60	31
1794	4.27	17	1934	7.60	31
1795	4.07	17	1835	6.08	25
1796	4.17	17	1836	7.60	31
1797	3.86	16	1837	8.41	34
1798	4.30	18	1838	8.41	34
1799	3.65	15	1839	7.60	31
1800	4.99	20	1840	7.45	30
1801	4.72	19	1841	7.56	31
1802	4.52	18	1842	7.56	31
1803	5.07	21	1843	7.82	32
1804	5.18	21	1844	7.93	32
1805	7.93	32	1845	7.76	32
1806	5.39	22	1846	8.59	35
1807	6.35	26	1847	9.10	37
1808	5.43	22	1848	8.79	36
1809	6.51	27	1849	8.93	37
1810	5.75	24	1850	9.14	37
1811	6.08	25	1851	9.01	37
1812	6.51	27	1852	9.43	39
1813	6.84	28	1853	9.32	38
1814	5.65	23	1854	9.50	39
1815	4.75	19	1855	9.47	39
1816	5.43	22	1856	8.49	35
1817	6.57	27	1857	8.84	36
1818	6.38	26	1858	9.45	39
1819	6.19	25	1859	9.51	39
1820	5.43	22	1860	9.69	40
1821	5.13	21	1861	9.83	40
1822	4.83	20	1862	9.72	40
1823	5.43	22	1863	9.88	40
1824	4.52	18	1864	11.92	49
1825	6.24	26	1865	14.87	61
1826	6.41	26	1866	17.51	72
1827	6.41	26	1867	16.84	69
1828	6.41	26	1868	16.74	68
1829	6.41	26	1869	18.84	77



TABLE 16.—CARPENTERS' WAGES, 1790-1939—*Continued*  
(Base year, 1913)

Year	Weekly wage	Index	Year	Weekly wage	Index
1870	17.75	73	1905	21.89	89
1871	16.60	68	1906	22.52	92
1872	16.49	67	1907	23.11	94
1873	16.24	66	1908	23.26	95
1874	15.87	65	1909	23.22	95
1875	15.56	64	1910	23.27	95
1876	15.14	62	1911	23.74	97
1877	14.31	58	1912	24.12	99
1878	13.43	55	1913	24.46	100
1879	13.66	56	1914	25.06	102
1880	13.77	56	1915	25.65	105
1881	14.53	59	1916	25.74	105
1882	14.82	61	1917	28.04	115
1883	14.05	57	1918	30.47	125
1884	15.11	62	1919	35.92	147
1885	14.93	61	1920	39.89	163
1886	14.88	61	1921	45.64	187
1887	14.70	60	1922	43.25	177
1888	14.88	61	1923	47.13	193
1889	14.76	60	1924	51.86	212
1890	15.05	62	1925	52.08	213
1891	15.40	63	1926	57.78	236
1892	15.40	63	1927	57.96	237
1893	15.57	64	1928	58.17	238
1894	15.28	62	1929	58.26	238
1895	14.88	61	1930	56.42	231
1896	14.64	60	1931	55.25	226
1897	14.93	61	1932	46.83	191
1898	14.70	60	1933	45.58	186
1899	16.26	66	1934	46.82	191
1900	17.82	73	1935	46.99	192
1901	19.38	79	1936	49.55	203
1902	20.94	86	1937	58.15	238
1903	20.35	83	1938	58.78	240
1904	21.58	88	1939	58.83	241

Note: The average wage of carpenters by decades, computed from the above table, is shown in Table 17 (p. 256).

consideration is given to the especially large number employed in the New York establishment. The wage figure for each year from 1853 to 1879 was, therefore, multiplied by the factor 0.921.

It was found that the 1870-1878 currency wage figures from U.S. Department of Labor *Bulletin* 18 averaged 0.917 of those resulting from the Aldrich Report data. As the former are more inclusive than the Aldrich data, the figures for 1840-1878 were multiplied by the factor 0.917. In the full table, however, we begin the *Bulletin* 18 figures with the year 1871, for which year the wage figures secured from the two sources were practically identical.

4. For 1871-1898, *Bulletin* 18, September 1898, of the U.S. Department of Labor presents the average daily gold wages in 12 cities for 1870-1898 — Baltimore, Boston, Chicago, Cincinnati, New Orleans, New York, Philadelphia, Pittsburgh, Richmond, St. Louis, St. Paul, and San Francisco. The daily wages were multiplied by six. Since these wages are for large industrial centers, they probably average higher than would a national average for more communities. The gold wages for 1870-1878 were converted into currency wages, using the conversion table on p. 667 of *Bulletin* 18. For the reasons given under 6 (below) the weekly figures were multiplied by the factor 0.9685.

5. Our previous computation gave a wage in 1898 of \$14.70, and the computation explained in the following paragraph shows a wage of \$20.94 in 1902. Accepting these as accurate, the wages for 1899-1901 have been regularly progressed.

6. 1902-1939. For all years except 1905 and 1906 the wages are based on the average resulting from the hourly wages in 19 important cities:<sup>1</sup> Buffalo, Chicago, Cincinnati, Cleveland, Denver, Detroit, Kansas City (Mo.), Milwaukee, Minneapolis, Newark, New York, Philadelphia, Pittsburgh, Providence, San Francisco, St. Louis, St. Paul, Tacoma, and Washington. The hourly wages are from the yearly charts of the Chicago Builders Association, the 1905 and 1906 figures being interpolated, and the 1921 figures being the average of figures for both Jan. 1 and Nov. 1. The national average was secured by weighting the figure of each city according to its population at the nearest United States census period.

Since the basic data referred to above are only for hourly rates it was necessary to convert these into weekly wages. To do this it has been assumed that the situation in Chicago was typical, in respect of the number of hours worked per week, of the remaining 18 cities. In that city the 48-hour week existed in 1900 and the 44-hour week in 1910. (Montgomery, *Industrial Relations in the Chicago Building Trades*, p. 114). The 44-hour week still prevailed generally until 1929; so in computing our table we have assumed a constant gradual decline from 48 to 44 hours from 1900 to 1909 inclusive and a 44-hour week from 1910 to 1929. In 1931 and 1932 Chicago carpenters had a 5-day week and in 1936-1939 a 40-hour week. On the basis of this a 40-hour week was considered for the computation of wages for the thirties.

The resulting figures were then multiplied by the factor 0.9685 for the following reasons:

- (a) The 1904 Report of the United States Commissioner of Labor presents (p. 374) average hourly wages of carpenters each year from 1890 to 1903, covering 227 employers in all geographical sections.

<sup>1</sup> For years 1927-1929 Spokane was substituted for Tacoma and, beginning with 1928, Jersey City was substituted for Newark.

- (b) The report gives in detail (pp. 459, 460) wages paid by 143 of these employers in 52 cities. All of our 19 cities except Washington are included.
- (c) Minus Washington, the average hourly wage in our 1902-1927 table and the average from the above 1904 report (both weighted according to the population of cities) were as follows:

	Appendix table	1904 U.S. table
1902	45.7	43.3
1903	45.0	47.0
Average.....	45.35	45.15

So far, then, as these two years (the only two included in each series) indicate, the data in the two series appear fairly comparable.

- (d) The weekly wage for 1890-1898 in 12 cities based on *Bulletin* 18 and the average based on data from 227 firms in over 52 cities (1904 Report, p. 48) reveal that the national average is 0.9685 of the average for the 12 cities.
- (e) It has been assumed that the same ratio now exists with reference to the national average and the 19-city average; and the latter therefore was multiplied by 0.9685 to secure the figures for 1902-1939 in Table 16.

TABLE 17.—AVERAGE MONEY WAGE OF CARPENTERS BY DECADES  
(Computed from Table 16)

Decade beginning	Average wage	Decade beginning	Average wage
1790	\$3.69	1870	\$15.51
1800	5.61	1880	14.64
1810	6.02	1890	15.21
1820	5.72	1900	21.41
1830	7.49	1910	26.65
1840	8.15	1920	51.20
1850	9.22	1930	52.32
1860	13.58		

### EARNINGS OF UNSKILLED FACTORY WORKERS, 1790-1939 (as shown in Table 18)

1. For 1890-1924, we have the index of wages of unskilled factory operatives by D Whitney Coombs, published by Columbia University Press, 1926, as *The Wages of Unskilled Labor in Manufacturing Industries in the United States, 1890-1924*. The year 1913 was used as the base of 100 (\$10.84 per week) in that study (*op. cit.*, p. 99). To arrive at average weekly wages, 1890-1924, the Coombs series of index numbers was multiplied by the base \$10.84 (with proper decimal adjustment).

2. For 1840-1889, we used the table of wages of factory operatives by Miss Edith



Abbott in "Wages of Unskilled Labor in the United States 1850-1890" (*Journal of Political Economy*, Vol. 13, p. 363). To transform the Abbott series into average weekly wages the daily figures given were multiplied by six. It was found that in the two years, 1890 and 1891, for which both series reported, the Coombs series was 1.23716 times the Abbott series. The Abbott series was therefore adjusted to the level of the Coombs series (considered the more reliable) by multiplying it (Abbott) by the factor 1.23716.

3. From 1790 to 1840, figures of laborers' wages are compiled from the 1885 Report of the Massachusetts Bureau of Labor Statistics (pp. 323-325). Where a "medium" figure for the year was given it was used in this table, otherwise an average was taken. It was necessary to interpolate the figures for 1831, 1832, 1836, and 1839. To get the weekly wage the Massachusetts daily wage figure was multiplied by six. Beginning with 1835 the figures are for laborers in factories. Figures for 1815 and 1828, the only previous years in which comparisons were made, showed factory and outside ordinary laborers receiving practically the same wage. The years 1840, 1845, 1848, and 1850 (the only ones in the period for which the Massachusetts figures are given) show the Sargent figures (based on the Abbott series as above) 0.987 times the Massachusetts figures. For years prior to 1840 we have multiplied the Massachusetts figures by 0.987.

4. For 1925-1939, we have used the National Industrial Conference Board figures of weekly earnings of unskilled male workers in foundries and machine shops for the fourth quarter of each year. These figures were multiplied by 0.963, the relation of the Coombs figures for 1920-1924 to the Conference Board's fourth quarter NICB figures for the above group in the same years.

TABLE 18.—UNSKILLED FACTORY LABOR, 1790-1939

(Index numbers with 1913 as base)

Year	Weekly wage	Index	Year	Weekly wage	Index
1790	\$2.38	22	1805	4.58	42
1791	2.74	25	1806	5.51	51
1792	2.79	26	1807	4.44	41
1793	3.19	29	1808	5.00	46
1794	3.39	31	1809	7.28	67
1795	3.95	36	1810	5.92	55
1796	3.78	35	1811	5.79	53
1797	3.95	36	1812	6.34	58
1798	4.25	39	1813	5.92	55
1799	3.31	31	1814	5.92	55
1800	4.10	38	1815	5.84	54
1801	4.56	42	1816	6.34	58
1802	4.94	46	1817	5.92	55
1803	3.62	33	1818	4.46	41
1804	4.60	42	1819	4.71	43

# AMERICAN INDIVIDUAL ENTERPRISE SYSTEM

TABLE 18. — UNSKILLED FACTORY LABOR, 1790-1939 — *Continued*  
(Index numbers with 1913 as base)

Year	Weekly wage	Index	Year	Weekly wage	Index
1820	4.01	37	1860	5.86	54
1821	4.44	41	1861	6.09	56
1822	4.35	40	1862	6.16	57
1823	5.13	47	1863	7.05	65
1824	4.97	46	1864	8.17	75
1825	4.19	39	1865	9.58	88
1826	4.69	43	1866	9.95	92
1827	5.92	55	1867	9.95	92
1828	4.09	38	1868	9.72	90
1829	4.50	41	1869	9.87	91
1830	4.35	40	1870	9.87	91
1831	4.76	44	1871	10.02	92
1832	5.16	48	1872	10.10	93
1833	5.56	51	1873	10.10	93
1834	5.92	55	1874	9.56	88
1835	5.92	55	1875	9.06	84
1836	5.30	49	1876	8.76	81
1837	4.68	43	1877	8.54	79
1838	4.68	43	1878	8.61	79
1839	4.67	43	1879	8.39	77
1840	4.75	44	1880	8.68	80
1841	4.68	43	1881	8.91	82
1842	5.12	47	1882	8.83	82
1843	4.82	45	1883	9.13	84
1844	4.75	44	1884	9.20	85
1845	4.60	42	1885	8.76	81
1846	4.97	46	1886	8.94	83
1847	5.01	46	1887	8.98	83
1848	5.20	48	1888	8.98	83
1849	5.57	51	1889	8.91	82
1850	5.94	55	1890	8.88	82
1851	5.57	51	1891	8.90	82
1852	5.60	52	1892	8.90	82
1853	5.72	53	1893	8.87	82
1854	5.79	53	1894	8.47	78
1855	5.86	54	1895	8.66	80
1856	6.31	58	1896	8.56	79
1857	6.31	58	1897	8.50	78
1858	6.05	56	1898	8.62	80
1859	6.05	56	1899	8.79	81

TABLE 18. — UNSKILLED FACTORY LABOR, 1790-1939 — *Concluded*  
(Index numbers with 1913 as base)

Year	Weekly wage	Index	Year	Weekly wage	Index
1900	8.91	82	1927	23.10	213
1901	9.14	84	1928	24.16	223
1902	9.34	86	1929	23.91	221
1903	9.63	89	1930	19.28	178
1904	9.71	90	1931	15.87	146
1905	9.80	90	1932	11.71	108
1906	10.22	94	1933	14.22	131
1907	10.62	98	1934	15.59	144
1908	10.08	93	1935	19.71	182
1909	10.21	94	1936	22.09	204
1910	10.48	97	1937	22.37	206
1911	10.14	94	1938	21.60	199
1912	10.33	95	1939	25.38	234
1913	10.84	100			
1914	10.82	100			
1915	10.86	100			
1916	13.20	122			
1917	16.31	151			
1925	23.72	219			
1926	23.56	217			

TABLE 19.—AVERAGE WEEKLY WAGE BY DECADES  
(Computed from table 18)

Decade beginning	Average weekly wage	Decade beginning	Average weekly wage
1790	\$3.37	1870	\$9.30
1800	4.86	1880	8.93
1810	5.72	1890	8.72
1820	4.63	1900	9.77
1830	5.10	1910	13.69
1840	4.95	1920	23.10
1850	5.92	1930	18.78
1860	8.24		

EARNINGS OF SKILLED FACTORY WORKERS, 1790-1939  
(As shown in Table 20)

1. From 1790-1844 we have used as a base the daily wages of carpenters in Massachusetts (1885 Report of Massachusetts Bureau of Labor Statistics) multiplied by six. The results were multiplied by 1.154, as machinists' wages in Massachusetts for the years 1799, 1815, 1825, 1835, 1837, 1838, 1845, and 1850 averaged 15.4 per cent higher than those of carpenters in the same years. (Prior to 1815, and indeed for some years thereafter, millwrights and machinists



were considered practically identical. The first listing of millwrights was in 1799, but, as yearly figures are widely scattered, it was considered best to base our yearly fluctuations on wages of carpenters.) The results were then multiplied by the factor 0.9048, the proportion of national wages of machinists for the years 1845-1850, as derived from the Aldrich Report, to the Massachusetts figures of actual machinists' wages for the same years (the figure for 1847 being interpolated in the Massachusetts group).

2. From 1845 to 1889 the figures of weekly earnings were obtained by multiplying by six the daily earning figures obtained from the Aldrich Report on Wholesale Prices and Wages. From the latter we have taken the figures of average January earnings of machinists in 12 plants (except the July figure from one plant in one year) and weighted the plant figures according to the number of machinists employed. The plants were distributed as follows:

Connecticut.....	2	New Jersey.....	1
Maryland.....	1	New York.....	6
Massachusetts....	4	Pennsylvania....	2
New Hampshire...	1		

In 1845, the last representative year, our figure is based on wages from two plants in Massachusetts, two in New York, and one in New Hampshire.

3. For 1890 to 1912, the figures are derived from index numbers of the weekly hours and wages per hour of machinists in *Bulletin* 163 of the U.S. Bureau of Labor Statistics. The establishments included were engaged in car-building and repair work in various states; ranging from 22 establishments for 1907-1910 to 70 in 1911 and 1912. The figure for 1912 of average full-time weekly earnings of machinists in 35 car-building and repair establishments in various states was given and from this base our 1890-1912 table of weekly earnings was compiled. The actual weekly earnings for 1913 are also given in the above report. The figures for 1890-1912 are probably too low, since workers in such establishments do not require the same amount of skill as machinists in many other types of plants.

4. From 1914 to 1919 the figures are based on Research Report No. 20 of the National Industrial Conference Board, entitled *Wartime Changes in Wages*. The average weekly earnings of male timework machinists in 51 establishments are presented (p. 12). But the largest earnings and increases were among the pieceworkers (pp. 8, 9, 10). Figures for piecework machinists are not presented. But taking for comparison tables of weekly earnings of timework and piecework machine operators (p. 13) the following results appear:

Year	Pieceworkers higher, per cent	Year	Pieceworkers higher, per cent
1914	19	1917	27
1915	13	1918	35
1916	24	1919	20

On the further assumption that during this period approximately one third of the skill machinists were pieceworkers, the NICB averages were increased 6 per cent for 1914; 4 per

ent for 1915; 8 per cent for 1916; 9 per cent for 1917; 12 per cent for 1918; and 7 per cent for 1919.

5. From 1920 the figures are from National Industrial Conference Board reports of actual average weekly earnings for the *final quarter* of each year of male skilled workers in foundries and machine shops. The NICB figures, for such workers, however, do not fairly portray for the present study the average wages of factory skilled workers. The figures are so low because semiskilled workers are included with the skilled in compiling the averages *Wages and Hours in American Industry, 1925, p. 23*).

The U.S. Bureau of Labor Statistics presents a standard of comparison with a study of 86,771 wage earners of 526 machine shops in 28 states (*Monthly Labor Review, March 1928, pp. 123-130; Bulletin No. 422, pp. 8, 18*). Taking from this report an unweighted average of the average weekly earnings of machinists, planer operators, and toolmakers in machine shops we get the following comparison for the three years presented:

Year	NICB	U.S. Bureau of Labor
1923	\$31.78	\$34.21
1925	31.67	35.59
1927	30.36	36.98
Average.....	\$31.27	\$35.59

It will be seen that the figures for skilled workers in machine shops average 14 per cent above the NICB averages which include both foundry workers and semiskilled operatives. The Conference Board figures beginning with 1920 were, therefore, multiplied by 114 per cent. Since the U.S. Bureau gives figures for but three years, we have been compelled to accept as accurate the trend revealed by the NICB figures.

TABLE 20.—SKILLED FACTORY LABOR, 1790-1939  
(Machinists—1913 used as base)

Year	Weekly wage	Index	Higher than unskilled, per cent
1790	\$3.70	21	55
1791	3.43	19	25
1792	3.65	20	31
1793	3.75	21	18
1794	4.93	28	45
1795	4.70	26	19
1796	4.81	27	27
1797	4.46	25	13
1798	4.96	28	17
1799	4.21	24	27

TABLE 20.—SKILLED FACTORY LABOR, 1790-1939—*Continued*  
(Machinists—1913 used as base)

Year	Weekly wage	Index	Higher than unskilled, per cent
1800	5.75	32	40
1801	5.45	31	22
1802	5.22	29	5
1803	5.85	33	63
1804	5.97	34	30
1805	9.15	51	100
1806	6.22	35	13
1807	7.33	41	65
1808	6.26	35	25
1809	7.52	42	3
1810	6.64	37	12
1811	7.02	39	21
1812	7.52	42	19
1813	7.89	44	33
1814	6.51	37	10
1815	5.48	31	7 (lower)
1816	6.26	35	1 (lower)
1817	7.58	43	28
1818	7.36	41	24
1819	7.14	40	50
1820	6.26	35	56
1821	5.92	33	33
1822	5.57	31	29
1823	6.26	35	22
1824	5.22	29	5
1825	7.20	40	72
1826	7.39	41	58
1827	7.39	41	49
1828	7.39	41	81
1829	7.39	41	64
1830	7.39	41	70
1831	8.77	49	84
1832	8.77	49	70
1833	8.77	49	58
1834	8.77	49	48
1835	7.02	39	19
1836	8.77	49	65
1837	9.71	55	108
1838	9.71	55	108
1839	8.77	49	88



TABLE 20.—SKILLED FACTORY LABOR, 1790-1939—*Continued*

(Machinists—1913 used as base)

Year	Weekly wage	Index	Higher than unskilled, per cent
1840	8.77	49	85
1841	8.58	48	83
1842	8.58	48	68
1843	8.58	48	78
1844	8.58	48	81
1845	8.29	47	80
1846	8.26	46	66
1847	8.60	48	72
1848	8.69	49	67
1849	8.98	50	61
1850	9.22	52	55
1851	9.23	52	63
1852	9.19	52	64
1853	9.28	52	62
1854	9.21	52	59
1855	9.70	54	65
1856	10.35	58	64
1857	9.83	55	56
1858	9.84	55	63
1859	9.80	55	62
1860	9.89	56	69
1861	10.12	57	66
1862	10.57	59	72
1863	11.79	66	67
1864	12.64	71	55
1865	14.78	83	54
1866	15.56	87	56
1867	15.91	89	60
1868	17.57	99	81
1869	16.10	90	63
1870	16.19	91	64
1871	15.97	89	59
1872	16.12	91	60
1873	16.13	91	60
1874	16.12	91	68
1875	15.71	88	73
1876	14.37	80	59
1877	12.85	72	50
1878	12.62	71	46
1879	12.57	71	50

TABLE 20.—SKILLED FACTORY LABOR, 1790-1939—*Continued*  
(Machinists—1913 used as base)

Year	Weekly wage	Index	Higher than unskilled, per cent
1880	12.81	72	48
1881	13.87	78	56
1882	14.45	81	64
1883	14.63	82	60
1884	14.45	81	57
1885	14.48	81	65
1886	13.72	77	54
1887	12.69	71	41
1888	14.05	79	57
1889	14.30	80	61
1890	14.08	79	59
1891	13.91	78	56
1892	14.13	79	59
1893	14.06	79	59
1894	13.32	75	57
1895	13.67	77	58
1896	13.52	76	58
1897	13.48	76	59
1898	13.68	77	59
1899	13.97	78	59
1900	14.11	79	58
1901	14.27	80	56
1902	14.63	82	57
1903	15.14	85	57
1904	15.63	88	61
1905	15.49	87	58
1906	15.82	89	55
1907	16.69	94	57
1908	16.96	95	68
1909	16.47	92	61
1910	17.63	99	68
1911	17.69	99	74
1912	17.66	99	71
1913	17.81	100	64
1914	18.13	102	68
1915	19.50	109	80
1916	23.09	130	75
1917	27.02	152	66
1918	35.27	198	73
1919	33.36	187	42

TABLE 20.—SKILLED FACTORY LABOR, 1790-1939—*Concluded*  
(Machinists—1913 used at base)

Year	Weekly wage	Index	Higher than unskilled, per cent
1920	38.13	214	43
1921	28.51	160	38
1922	32.59	183	60
1923	36.22	203	62
1924	35.03	197	57
1925	36.09	203	52
1926	35.97	202	53
1927	34.58	194	50
1928	36.57	205	51
1929	37.31	209	56
1930	28.97	163	50
1931	23.29	131	47
1932	18.56	104	58
1933	22.71	128	60
1934	25.18	141	62
1935	29.72	167	51
1936	33.56	188	52
1937	34.54	194	54
1938	32.01	180	48
1939	37.06	208	46

TABLE 21.—EXCESS OF MACHINISTS' OVER LABORERS' WAGES

Decade beginning	Average excess, per cent	Decade beginning	Average excess, per cent	Decade beginning	Average excess, per cent
1790	28	1840	74	1890	58
1800	37	1850	61	1900	59
1810	19	1860	64	1910	68
1820	47	1870	59	1920	52
1830	72	1880	56	1930	52

TABLE 22.—MACHINISTS' MONEY WAGES

Decade beginning	Average wage	Decade beginning	Average wage
1790	\$4.26	1870	\$14.87
1800	6.47	1880	13.95
1810	6.94	1890	13.78
1820	6.60	1900	15.52
1830	8.65	1910	22.72
1840	8.59	1920	35.10
1850	9.57	1930	28.56
1860	13.49		



## COMPOSITORS' WAGES, 1840-1939

(As shown in Table 23)

1. Prior to 1840. Accurate data for the years of this period are not available. The 1885 Report of the Massachusetts Bureau of Labor Statistics gives the following weekly wages of compositors:

1815	\$6.78	1837	\$9.00
1825	7.50	1838	9.00
1835	8.82		

2. 1840-1869. The wage for 1840 is taken from the 1885 Report of the Massachusetts Bureau of Labor Statistics. Beginning with 1855 the figures are the weighted average daily wage, multiplied by six, of compositors in three book and newspaper plants, one in Connecticut and two in New York, as given in the Aldrich Report (Vol. I, p. 113; Vol. II, Table XII). The figures for 1841, 1844, 1849, and 1850 are interpolated. Where figures for both January and July are given in the original data, we have used only those of January; the 1840 Massachusetts figure is justified since for three comparable dates data from the former show weekly wages averaging only 12 cents less. A comparison of similar Aldrich Report data for the decade 1880-1889 with our figures for the same period (derived as previously described) show the latter, covering the country as a whole, averaging 10 per cent higher. Assuming that the same ratio would hold for the entire period, all Aldrich Report weekly averages beginning with 1840 were multiplied by 110 per cent.

3. 1870-1889. Daily gold earnings of compositors in 12 important industrial cities as given in *Bulletin* 18 of the U.S. Department of Labor, are multiplied by six. Probably this bulletin states, the average from 12 large cities is larger than the average from the entire country. *Bulletin* 18 gives the figures from 1890-1898, which period is also included in the 1904 Report of the Commissioner of Labor. The latter figures, covering a larger area, average for the 9 years 95.4 per cent of the 12-city average. Therefore, we have multiplied the latter figures beginning with 1870 by 95.4 per cent. The gold wages for 1870-1878 were converted into currency wages, using the conversion table on p. 667 of *Bulletin* 18.

1870	1.213	1875	1.125
1871	1.107	1876	1.128
1872	1.091	1877	1.062
1873	1.127	1878	1.014
1874	1.114		

4. 1890-1907. Weekly earnings of book and job compositors. Figures to 1903 from the 1904 Report of the Commissioner of Labor, p. 169; figures after 1903 from *Bulletin* 18 of the U.S. Department of Labor, pp. 54, 108. The averages are based on data from 85 establishments in all sections of the country.

5. 1908-1919. Apparently only union scales covering this period exist for the United States. The Canadian Department of Labor, however, has published (Supplements to *Canadian Labor Gazette* of March 1921, February 1922, and January 1928) index figures of printing trades wages in 13 Canadian cities, 1901-1927. Although the table is based on union figures, for the most part wage data from other sources also are apparently included (March 1921 Supplement, p. 1, and January 1928 Supplement, pp. 3, 5; the figures are based on September averages, "which in general reflect conditions up to the end of the year"). The printing trades index embraced two trades (newspaper hand compositors and job office cylinder pressmen) for 1901-1920. The reliance for 1901-1920 on wages of newspaper hand compositors probably somewhat unduly emphasized the union factor. Although the Canadian figures for 1920-1927 are quite a bit lower than the NICB figures, we may justifiably assume that the Canadian index will fairly represent the movement of American printing wages. We, therefore, adapted the Canadian index to our 1890-1907 table, arbitrarily using the year 1906 as the connecting link.

The comparative figures for the 7 years beginning with 1901 are as follows:

Year	United States	Adapted
1901	\$16.48	\$15.85
1902	16.77	16.26
1903	17.14	16.42
1904	17.52	17.21
1905	17.83	17.66
1906	18.04	18.04
1907	18.37	18.87
Total . . . . .	\$122.15	\$120.31

The weekly average of the adapted scale is 1.5 per cent less than the United States figures, indicating a fairly close approximation.

The comparative figures for 1920 and 1921 are as follows:

Year	NICB	Adapted
1920	\$45.50	\$43.24
1921	43.41	44.82
Average . . . . .	\$44.45	\$44.03

The adapted figures here average about 1 per cent less than the NICB figures. The figures for 1908-1919 appear in the following table of weekly earnings. It will be observed that the increase from the 1919 figure to the NICB 1920 figure is \$10.87, or 31.4 per cent. That this jump is not too extreme is shown by the fact that the United States union scale of book and job compositors increased 31.5 per cent from 1919 to 1920 (derived from table in U.S. *Monthly Labor Review*, December 1922, p. 113). Moreover, the U.S. Bureau of Labor Sta-

tistics states that the general wage level increased 27.2 per cent from 1919 to 1920 (*Monthly Labor Review*, February 1928, p. 120).

6. 1920-1939. The average weekly earnings of male skilled book and job compositors for the last quarter of each year, as compiled by the National Industrial Conference Board. But as the NICB figures include semiskilled as well as skilled workers (*Wages in American Industry*, 1925, p. 23; letter of Feb. 8, 1929, from the chief statistician of the NICB; *Wages, Hours and Employment in the U.S., 1914-1928*) uncorrected use of the figures would not give true picture. They have, therefore, been multiplied by 114 per cent, on the assumption that in this instance, as in that of skilled machinists, the true figure is 14 per cent higher than the combined average for skilled and semiskilled as reported by the NICB.

TABLE 23.—COMPOSITORS' WEEKLY EARNINGS

Year	Weekly earning	Year	Weekly earning
1840	\$9.90	1870	17.49
1841	9.90	1871	17.49
1842	9.90	1872	17.36
1843	9.90	1873	17.55
1844	9.90	1874	17.47
1845	9.90	1875	17.52
1846	10.99	1876	17.11
1847	10.99	1877	16.65
1848	10.99	1878	15.96
1849	10.43	1879	15.86
1850	9.90	1880	15.91
1851	9.90	1881	15.91
1852	9.90	1882	16.08
1853	11.55	1883	16.08
1854	11.55	1884	16.20
1855	10.99	1885	16.20
1856	11.55	1886	16.08
1857	12.94	1887	16.14
1858	10.99	1888	16.08
1859	11.20	1889	16.03
1860	11.15	1890	15.84
1861	11.15	1891	16.00
1862	11.42	1892	16.00
1863	11.35	1893	16.04
1864	13.89	1894	16.13
1865	16.63	1895	16.05
1866	16.43	1896	15.94
1867	16.50	1897	16.08
1868	19.73	1898	16.12
1869	19.93	1899	16.21



TABLE 23. — COMPOSITORS' WEEKLY EARNINGS — *Concluded*

Year	Weekly earnings	Year	Weekly earnings
1900	16.28	1920	45.50
1901	16.48	1921	43.41
1902	16.77	1922	43.07
1903	17.14	1923	44.98
1904	17.52	1924	46.87
1905	17.83	1925	48.72
1906	18.04	1926	48.24
1907	18.37	1927	48.01
1908	19.40	1928	48.92
1909	19.94	1929	50.96
1910	20.99	1930	48.63
1911	21.85	1931	44.80
1912	22.85	1932	39.33
1913	23.80	1933	36.84
1914	24.37	1934	39.50
1915	24.46	1935	42.91
1916	25.18	1936	46.17
1917	26.49	1937	46.57
1918	29.44	1938	45.47
1919	34.63	1939	48.11

TABLE 24. — AVERAGE WEEKLY EARNINGS BY DECADES  
(Computed from Table 23)

Decade beginning	Average wage	Decade beginning	Average wage
1840	\$10.28	1890	\$16.04
1850	11.05	1900	17.78
1860	14.82	1910	25.41
1870	17.05	1920	46.87
1880	16.07	1930	43.83



## VI

# AGRICULTURE<sup>1</sup>

### THE NATURE OF AGRICULTURE

BEFORE reviewing some of the major statistical facts about farming as an industry, it is both desirable and appropriate to consider some of the major characteristics of American agriculture as a "way of life."

1. Youth on the farms faces daily the basic fact that the way to get something is to work for it.

2. Farm youth is accustomed to see growth and development in nature.

3. Agriculture is the nearest to a self-sufficient occupation.

4. Agriculture is for the most part carried on by individual proprietorship in the ownership, employment, and management of property. As a whole, farmers are staunch advocates of private ownership and use of property.

5. With its relatively high degree of individualism and self-sufficiency, agriculture is for millions not only a means of earning a living but also a distinctive "way of life."

In recent decades, there have been an accelerated decrease in the isolation of the farm dweller, owing to such inventions as the telephone, automobile, and radio, and at the same time a decrease in the proportionate number of farm dwellers needed owing to rapid developments in technology under which food for a given population can be produced with ever fewer man-hours.

These factors create what we think of as "the farm

*Agriculture is a way of life for millions of Americans.*

*In it youth learns the importance of work, and the processes of growth in nature.*

*It is relatively individualist, self-sufficient and independent.*

*But changing conditions created "the farm problem."*

<sup>1</sup>In the preparation of this chapter we have drawn heavily, even to the extent of long quotations, from the chapter on Agriculture by Asher Hobson in *Problems of the Postwar World*, edited by T. C. McCormick, McGraw-Hill Book Company, Inc., New York, 1945.



problem"—too large a farm population, resistance to migration from the farm because of natural inertia and like for the "way of life," and relatively low dollar income the farms.

How can agriculture most efficiently supply food and fiber requirements of society and at the same time maintain its historic place as a bulwark of the American individual enterprise system?

### SIZE OF THE FARMING INDUSTRY

*Six million farms employ 9 to 12 million persons, house 26 million, are worth 50 billion dollars.*

Farming is a sizable industry. There are more than 5.5 million farms in the United States, some reports about 6 million. These give full-time employment—varying according to the season—to from 9 to 12 million persons over fourteen years of age. Most of this work force consists of farm operators and members of their families. It is estimated that in April 1944 nearly 26 million persons lived on farms and were directly dependent upon agriculture for a living. This is slightly less than one-fifth of the nation's total population. According to the 1940 Census, the capital invested in farming in 1940—land, buildings, livestock, and machinery—amounted to 41,000 million dollars. If one subtracts from this amount the estimated farm indebtedness of both long- and short-term nature, around 8,800 million dollars, the net investment of farmers in 1940 was in the neighborhood of 32,400 million dollars. Recent increases in prices of land, livestock, and machinery would place the 1946 figure well above that for 1940, perhaps even as high as 50,000 million dollars.

*Three fifths are commercial farmers, others do not market products regularly.*

It should be noted that about three fifths of the country's farmers are "commercial" farmers, while the other two fifths produce relatively little of the products which enter the nation's markets since most of their production is consumed by their own families or with only occasional commercial marketing. This fact has great significance when we consider that most of the commodity programs of government aid to farmers have been designed to help commercial farmers and have left the real agricultural low-income group almost untouched. It should be observed also that most of the available agricultural statistics

be affected by the fact that over-all averages include the two dissimilar groups of commercial and noncommercial farmers.

Gross farm income for 1945 (which includes cash from marketings, value of farm produce grown on the farm and consumed by the family, an imputed rental value for the farm dwelling, and government payments), was estimated at 24,600 million dollars. Production expenses were estimated at 11,400 million dollars, leaving a net income of farm operators (after the payment of farm property taxes) of 13,200 million dollars. Net income from farming to persons on farms amounted to around 1 per cent of the total national income. So much for the size of the business with which this discussion deals.

### CHANGING PLACE OF AGRICULTURE

With each passing decade agriculture occupies a smaller segment in the total economy. This statement is based upon two generally accepted trends: (1) agriculture receives a declining portion of the national income and (2) the farm population is growing smaller.

The net income from farming to persons on farms, a percentage of national income, was 12½ per cent on average for the period 1910 to 1914; 15 to 17 per cent for the World War I boom years 1918 to 1919. These two years probably correspond closely, in artificial price influences, with the years 1942 and 1943. In 1942 and 1943 the percentage was 9.5. The important thing to remember is that during those years, agriculture's most prosperous years in two decades, farmers received from farming less than 10 per cent of the national income.

The farm population is declining, both absolutely and relatively. But the decline has not been constant and, as a whole, is greater relatively than absolutely. Thus the number of people living on farms on Jan. 1, 1910, was 32 million; on July 1, 1941, it was 30 million; in 1943 it was estimated as slightly under 28 million; on Apr. 1, 1944, it was estimated as slightly under 26 million. It will be observed that in the four years 1941 to 1944 the net

*Gross farm income for 1945 was 24.6 billion dollars, net income, 13.2 billion dollars.*

*The farm proportions of national income and of population are declining.*

*Net incomes of farmers on farms totaled 15 to 17 per cent of national income in 1918-1919; only 9½ per cent in 1942-1943.*

*Farm population in 1910 was 32 million; in 1941, 30 million; in 1944, 26 million.*

migration from farms was over 4 million persons, or two as many as in the entire period from 1910 to 1940.

Less than one half of the 1941-1944 decline was due to farm boys going into the armed forces; most of it was due to the occupational opportunities in war work. In other words, farm population declines most when urban industry is busiest. It works the other way too; during the depression year 1932 there was a net increase of more than 1 million people on farms.

*Proportionate decline began about 1830.*

But even taking into consideration the influence of the war upon farm population, it can be said that over the period of many decades the percentage of total population engaged in agriculture has been declining. The decline in fact, started about 1830.

*Reasons for decline in farm population:*

*(1) slower increase in demand for farm products than for others, (2) mechanization of farms, (3) decline of farm exports, and (4) decline of per capita farm income.*

The decline started primarily because of the expansion of manufacturing industry in the new nation; the decline in this century has resulted primarily from the following conditions, which reduced the proportionate and in some cases even the actual, need for farm labor with inevitable influence upon farm population:

1. Although demand for agricultural products has expanded, domestic consumption in the United States has expanded in rough relation to the growth of population and although there is a strong tendency toward improvement in American dietary habits, nevertheless demand for agricultural products in a relatively well-fed country such as the United States does not expand so rapidly as that for many other types of goods and services.

2. Efforts of manufacturers, aided by research in agricultural colleges and by suggestions from practical farmers, have resulted in mechanization which has greatly reduced the amount of physical labor required to grow a given amount of crop. (This point is subsequently expanded.)

3. World market conditions have changed. United States exports of farm products to many countries have been reduced because other countries can produce them more cheaply for their own use or for export.

4. Because people are naturally reluctant to change their ways of life, and because the birth rate has been



higher among the farm population than among urban population, there has steadily tended to be a relative over-supply of people attempting to make their living by farming. This fact has kept average farm incomes below average urban incomes. This income discrepancy has exerted steady pressure tending to cause workers to transfer from agriculture to nonagricultural industries.

This tendency is not one to be deplored. Our nation is but a relatively inelastic demand for the chief farm products, food, and an almost limitless demand for urban products. Therefore, if the desires and needs of the public are to be met and if unneeded workers are not to be retained in agriculture, some inducement must be in operation to cause surplus workers to move away from agriculture. To produce this desirable result no force has yet been discovered which is fairer, more equitable, and more effective, than the pressure of free, unregulated, competitive market prices for farm products and farm labor—coupled with free entrance and opportunities for nonagricultural employment, which do not always exist.

If one puts income and population together one finds that one fifth of the population receives from farming less than one tenth of the national income. These figures emphasize three developments:

1. A larger and larger portion of our population is engaging in pursuits other than farming.
2. The United States has become a *net* importer of food products.
3. Farm income, dollar for dollar, is not keeping pace with the incomes of the nonfarm portion of the population. (This, however, as subsequently pointed out, is not the whole story of factors in farmers' welfare.)

President Roosevelt in one of his messages to Congress made a statement which, because of the importance of its source, requires explanation. Although technically accurate, it is subject to serious misinterpretation.

*Unneeded workers should not remain in agriculture, but opportunity outside should become more freely available.*

*A free market for products and labor is best regulator.*

*Since one fifth of the population gets from farming less than one tenth of the national income, these facts are emphasized:*

1. More are seeking other pursuits.
2. We have become a net importer of foods.
3. Farm income is falling behind non-farm incomes.

*Farm income  
has increased  
largely in  
recent years.*

In 1942 the increase in the average income per farmer over parity base period was 38 per cent greater than the increase in average income of the other people in the country. In 1943 it was per cent greater.

In plain language the farmer this year is not only better off relation to others in the population than he was before the war broke out, he is better off than he was in the base period 1910-1914, and better off than he has been in any year since that time.<sup>1</sup>

It seems likely that the President's conclusions were derived from such of the data in Table 1<sup>2</sup> as were then available (through 1942 and estimates for 1943). They show approximately the ratios he mentioned.

TABLE 1

	1910-1914		1942		1943		1944	
	\$	%	\$	%	\$	%	\$	%
Per capita income from farming, to persons on farm.....	\$134	100	\$389	290	\$522	390	\$534	...
Per capita income, nonfarm population.....	488	100	1,012	207	1,212	248	1,281	...
Parity income ratio.....	...	100	...	140	...	157	...	...

*But the difference in living standards may not be so great as these statistics suggest.*

It will be noted that per capita income from farming increased from \$134 in 1910-1914 to \$522 in 1943—an increase of \$388. But the percentage increase was 290 per cent. By 1944, per capita farm income was \$534—an increase of \$400 over the 1910-1914 average, or 298 per cent. The increase for the nonfarm population was from \$488 in 1910-1914 to \$1,212 in 1943—an increase of 148 per cent—and to \$1,281 in 1944—an increase of 162 per cent. Thus, though the increase in income of the nonfarm population in absolute dollars was more than in the farm population, the increase in nonfarm income was less in relation to the 1910-1914 base than in farm income. There is need for more scientific comparison of the per capita income of farm and nonfarm populations.

<sup>1</sup> Message of the President of the United States, "Outline of Food Program," H.R. Document No. 347, 78th Congress, 1st Session, pp. 11-12, Oct. 31, 1943.

<sup>2</sup> Department of Agriculture, "Agricultural Statistics," 1942, and "Farm Income Situation," June 1943.

and nonfarm population. We doubt that there is so much difference in living standards as the figures seem to indicate.

When one divides the percentage increase of the farm population by the percentage increase of the nonfarm population since the base period 1910-1914 one gets what is technically known as the "parity income ratio," which as the President said is favorable to farmers—when expressed percentagewise. But farm income when measured in dollars has not kept pace with the incomes of the nonfarm population. On the other hand, it should be explained that figures such as these mean little, made up as they are of national averages, which include the baby in the cradle and the grandfather in the rocking chair. The farm population includes the sharecropper of the South with little or no capital, and the highly mechanized farms of the corn-belt and the dairy sections. The nonfarm population includes the street sweeper and the captain of industry.

#### THE PARITY INCOME CONCEPT

The parity income concept was formulated and expressed in law in an attempt to overcome some of the shortcomings of parity price. Parity price is an attempted measurement of the farmers' purchasing power of a given period as compared with his purchasing power during the base period, 1910-1914. Parity income is an attempt to furnish a comparison of the farmers' material well-being with that of the nonfarm portion of the population. Parity income is defined by law as "that per capita net income of individuals on farms from farming operations that bears to the per capita net income of individuals not on farms the same relation as prevailed during the period from August 1909 to July 1914." Parity income has the inherited weakness of its ancestor, parity price, in that both, by inference at least, are designed to reestablish a past relationship. They attempt to measure the economic well-being of farmers by a historical standard. But progress comes through shifting relationships. Had there been widespread adoption of the parity concept 75 years ago,

*"Parity" is same ratio of per capita farm income to nonfarm income as in base period 1910-1914.*

*The attempt to reestablish this past relationship was enacted into law.*



*It disregarded changes that constitute progress.*

*But farmers produced 39 per cent more in 1942 than in 1919 for same amount of money.*

*Reasons were (1) improved machines and methods, (2) release of acreage producing feed for workstock, and (3) unusual growing weather.*

Wisconsin might have continued as a leading wheat-producing state. Denmark would in all probability still be a grain-producing nation, and England an agricultural country. Under such a concept the carriagemaker could have held his own. (This is on the assumption that parties can succeed, though it has to a considerable extent failed in actual practice as pointed out previously.)

There is another feature of farm income deserving of attention. In some quarters much is made of the fact that farm income in 1942 exceeded the previous all-time high of 1919. To be sure, farmers had good incomes in 1942. They had good incomes in 1943. Both years in turn set new high records for volume of production. In both years heavy yields were accompanied by fairly good prices. Ordinarily, large crops bring low unit prices. But in 1942 and 1943 large crops sold for good prices. Much to sell at acceptable prices means good farm incomes. But, even so, net farm income from farming was only 3 per cent higher in 1942 than in 1919. What most people do not know is that farmers gave the nation and the world 39 per cent more food in 1942 than in 1919 for about the same amount of money.

Some may wonder how farmers could produce 39 per cent more food in 1942 than was produced in 1919. There are a number of reasons. The most outstanding are:

1. Farming is in the machine age. Technological improvements are not confined to the assembly line of factory. The increased use of improved farm machinery will continue to spread man-hours over more and more acres. The general-purpose rubber-tired tractor is probably the outstanding single machine for increasing farm output per man. There are many others. The widespread use of better seeds and the adoption of improved tillage practices have left their mark.

2. Since the last war, over 30 million acres formerly used for growing feed for horses and other workstock, together with some 15 million acres of pasture, have been released for the growing of food, or for the growing of feed for meat- and food-producing animals. In effect, the

res released have added an area with a productive capacity of over three times that of a state such as Wisconsin.

3. The third reason is probably the most important. Providence has been kind—mighty kind. For the United States as a whole we have had exceptionally fine growing weather during the past 7 years. Most of these years in turn have set new production records. Agricultural production in 1942 was 25 per cent above normal—normal based upon the average production of the 5 years 1935 to 1939; in 1943, 29 per cent; in 1944, 33 per cent.

But the point to be emphasized here is that the high farm incomes of 1942 and 1943 were due in part to huge increases in production, and not to increases in prices alone. It is probable that had normal growing seasons prevailed farm incomes, at present price levels, would not have exceeded those of the previous war.

Much recent public discussion has revolved around the wartime earnings of farmers as compared with other large economic groups, especially labor. Although such comparisons are subject to many inaccuracies, they merit analysis. The greatest difficulty is occasioned by the fact that farm earnings represent a combined return from invested capital, labor, and managerial effort. They also include considerable amounts of work performed by the housewife and children under fourteen years of age who are not classed among the employed. The common practice is to compare these combined earnings with wage incomes of industrial workers. Table 2 contains such a comparison.

In comparing the first two columns of this table, the fact must be kept in mind that differences between the real incomes of persons in agriculture and the real incomes of employed urban workers are not so large as the differences in money incomes here shown might seem to indicate. The farmer is enabled to secure both housing and food, and frequently fuel and automobile upkeep, at prices substantially lower than those paid for comparable goods in the city. Furthermore, in times of unemployment, the farm dweller is not so adversely affected as is the city worker.

*Farm income, being return on capital, management, and labor, is not fairly comparable with wages.*

*Real incomes in farming are not measurable by same standards as in other occupations. Cost of housing, food, fuel, etc., may be much less.*

# AMERICAN INDIVIDUAL ENTERPRISE SYSTEM

TABLE 2.—AVERAGE INCOME PER WORKER IN AGRICULTURE AND INDUSTRY  
(United States, 1910-1944)

Year	Average net income per person engaged in agriculture <sup>1</sup>	Wage income per employed industrial worker <sup>2</sup>	Index number (1910-1914 = 100)	
			Average net farm income per person engaged in agriculture	Wage income per employed industrial worker
1910	371	573	101	98
1911	348	562	95	96
1912	371	575	101	99
1913	382	600	104	103
1914	360	603	98	104
1915	381	622	104	107
1916	465	694	127	119
1917	690	818	188	140
1918	882	1,064	241	183
1919	969	1,188	264	204
1920	753	1,411	205	242
1921	417	1,234	114	212
1922	453	1,182	124	203
1923	532	1,274	145	219
1924	559	1,273	153	219
1925	642	1,293	175	222
1926	609	1,318	166	226
1927	621	1,311	169	225
1928	612	1,323	167	227
1929	649	1,334	177	229
1930	489	1,249	133	214
1931	322	1,130	88	194
1932	218	929	59	159
1933	290	900	79	154
1934	402	983	110	169
1935	469	1,058	128	182
1936	538	1,130	147	194
1937	567	1,219	155	209
1938	494	1,134	135	195
1939	507	1,205	138	207
1940	531	1,273	145	219
1941	733	1,495	200	257
1942	1,041	1,847	284	317
1943	1,362	2,156	372	370
1944 <sup>3</sup>	1,456	2,360	397	405

<sup>1</sup> Aggregate net income of farm operators (excluding value of inventory changes) plus wages of hired laborers divided by average farm employment.

<sup>2</sup> Annual earnings of factory, railroad, and mining workers divided by average employment.

<sup>3</sup> Estimated.

SOURCE: 1944 *Outlook Charts*, Bureau of Agricultural Economics, U.S. Department of Agriculture, November 1944, p. 6.



On the other hand, the farmer may pay prices slightly higher than the urban resident for goods purchased from merchants. In general, however, it seems reasonably certain that his dollar goes farther than does the urban worker's dollar. Nevertheless the differential between their money incomes is so great as to make it almost certain that the living scale based on the average income of persons in agriculture has consistently been substantially lower than that of the average worker employed in manufacturing, mining, and railroading.

It will be noted that the *index* of net farm income per person engaged in agriculture stood at 372 in 1943 as compared with 370 for the wage income per employed industrial worker. But this shows merely the comparison with an earlier period in each case; the dollar income of the industrial worker was well above that of the farmer. In fact the increase during the period 1910 to 1943 was \$1,565 for the industrial worker as compared with only \$1,021 for the person employed in agriculture.

All the above comparisons of income of farmers with the general population ignore a considerable amount of income which farmers receive from other sources than agriculture. According to the Department of Agriculture, the "total income of persons living on farms from nonagricultural sources" averaged 2,100 million dollars in the years 1935 to 1939, but had increased to 4 billion dollars in 1944. On a per capita basis, such income increased from \$67 in 1935-1939 to \$158 in 1944, and was about the same in 1945.<sup>1</sup>

## THE OCCUPATIONAL TREND

The fact that there are now 4 million fewer people on the land than there were 30 years ago merits further consideration. How serious to agriculture, and to the nation, is this cityward movement? From agriculture has always come a fair portion of the workers in commerce and industry, including many of the top executives. It will continue to be so. Farm families will continue to in-

*Yet average living scale in farming has been substantially lower than in manufacturing, mining, or transportation.*

<sup>1</sup> U.S. Department of Agriculture, "The Farm Situation," June 1946.

crease in population numbers faster than rural areas can absorb the increase. The farm population reproduction rate is almost twice that of the urban population. Here are some impressive figures:

In 1880 one half of all workers were engaged in agriculture.

In 1940 only one fifth of all workers were engaged in agriculture.

During the same 60-year period agricultural production continued at about the same per capita level for the population as a whole. That is, in 1940 one fifth of all workers produced about as much farm products for every man, woman, and child in the United States, as did one half of the workers 60 years earlier. These figures are but testimony of the increased efficiency of American farm production. This increased farm production per man per hour was speeded up during the war. Technological improvements will continue to spread the labor of one man over more products and more acres. This is an economic gain; for it will enable the same volume of food (and other farm products) to be produced with less human effort or enable the same total amount of effort to produce more. Farm youth will continue to seek occupational outlets in cities. This is a good thing for the cities, and for the nation.

There is foundation for the assertion of the high importance to the continued well-being of this country that a considerable portion of its citizens be farm-reared. One may doubt that the farm can be equaled as an environment for the development of resourcefulness and self-reliance. The farm provides in goodly measure that discipline which goes far in molding good citizens. The farm boy and girl are early placed on their own. Day-to-day tasks present them with new situations. Duties require them to be self-reliant. They must exercise initiative. Their environment, made up largely of growing, developing, and changing things, teaches them to think. Here one sees freedom of individual action at its best. A hog goes "A.W.O.L." by breaking through a fence. The boy or girl that attempts to bring that hog back to camp can rely upon no established rules or procedures. He or she must act as best meets the emergencies of the moment.

*Occupational trend away from farms has been an economic gain, for farm production has kept up with demand and farm youth has been an important element in urban life.*

*Farm life has been fine training school for citizenship in a free society and should be kept at attractive level.*

they may be many. Although the nearly 6 million farms of the nation represent a wide variety of conditions, yet as a whole it would be difficult indeed to designate a better environment than the average farm for citizenship training in a democracy. In this respect the farm is a great national asset.

But the question arises, "How long, and to what extent can this cityward trend continue without injury to agriculture?" Certainly, there are limits to the numbers which can leave the farm and still permit the maintenance of a healthy agriculture. The limit is not so much dependent upon the number that leave as upon the quality of those that stay. The desired goal is that those farm youth who want to farm and are adapted to farming remain upon the land with a fair chance of enjoying an acceptable scale of living.

*How long and how great a shift from farm to city is consistent with a healthy agriculture?*

### *Adjusting Agriculture to the Trend*

How is agriculture to provide that chance? If one should go down the public highway and ask farmers living on both sides of the road *what* they think agriculture should have, and *how* agriculture is to obtain what they think it should have—one would probably not get conclusive answers. It is likely that most farmers would indicate that agriculture is entitled to something better than it had following World War I and preceding World War II. If pressed, they would probably agree also that they do not expect prices for farm products to continue at present high levels. In fact this was definitely indicated in 1945 polls of farm opinion. Even though farmers may not be able to express themselves clearly on the *what* and *how* of agriculture's future, continuous agitation for farm relief during the 1920s and the 1930s has caused many of them to do some hard thinking on this very subject. Farm leaders have long tried to formulate standards for rewards that would place farming on a higher financial plane. It is not an easy thing to do.

*How may farming be made more attractive financially?*

For example, it is generally agreed that agriculture, like every other segment of our economic life, should be rewarded in proportion to its contribution to national wel-



*The public interest requires that agriculture be self-supporting.*

*A test of efficiency must be applied, as in other skilled occupations, but this can be met on family farms.*

fare. Farmers have a right to insist on as much. They cannot legitimately ask for more. The only manner of attaining this end from the economic point of view is through the mechanism of the free market. The farm relief legislation of the 1930s was designed to establish an artificial balance between the rewards to agriculture and other large economic groups. The results did not come up to expectations. This legislation required large public expenditure but did little to place agriculture on a self-supporting basis. It is in the public interest that agriculture become self-supporting. A healthy agriculture must be able to go ahead under its own power and under its own direction and control. This means that people cannot be expected to stay in agriculture unless the returns are sufficient to provide an acceptable scale of living to reasonably efficient farmers.

To some the term "efficient farmer" tends to complicate this statement. Yet one may well doubt that agriculture as an industry will ever be so prosperous as to be able to assure a living to all who are willing to farm regardless of their capabilities or willingness to work. Farming is a skilled occupation. It should be regarded as such. The only way to establish farming as a technical pursuit worthy of the pay of technicians is to reward efficiency. This can hardly be done by making farming a catchall, through attempting to provide a haven for those who farm as a last resort. The public will hesitate to continue to supply funds to provide economic security on the land for those who unquestionably do a poor job at farming. But the development of farm efficiency need not mean the destruction of farming as a desirable mode of living. Electrification and mechanization will make for easier and more productive work, and for more comforts and conveniences in the home. Already we take for granted the automobile, which permits consolidated schools and gives access to both markets and movies.

Dr. Karl Brandt in his *Reconstruction of World Agriculture* (1945) concludes (p. 262):

Nowhere in the world have the most efficient and profitable large-scale farm enterprises ever seen fit or been able to provide the laborers with housing facilities, real income, or general amenities free

their rural existence similar to those provided by millions of family farms in Europe or the United States. . . . It has not yet been proved that given equal opportunity family farming could be beaten in the costs of production and in technical and economic performance by large-scale farms.

## RELATION OF INDUSTRIAL PROSPERITY TO AGRICULTURE

Ours is a mutually dependent economy. Agriculture is dependent upon industry, commerce, and labor in industry and commerce, just as they are dependent upon agriculture. One can show this relationship with other segments of the national economy by tracing the forces which caused farm prices to rise as a result of the defense programs and the war. The framework of the sequence of events, as they have actually occurred, is about as follows:

- (1) *War involves huge government expenditures*, which promote
- (2) *increased industrial activity*, which brings about
- (3) increased employment. This in turn results in
- (4) higher wages and increased pay rolls which mean
- (5) *more consumer purchasing power*. This is reflected in
- (6) *increased consumer demand* which
- (7) increases prices, including farm prices, followed by
- (8) rising land values, usually as during World War I, with mounting indebtedness. Then come
- (9) end of the war and collapse of the inflationary prosperity, which means
- (10) lower land values,
- (11) more tax delinquency, and
- (12) mounting foreclosures.

That is what happened during World War I and also, through item 8, during World War II (except that farm indebtedness apparently did not rise). If we are to prevent the remainder of the cycle from occurring, we must have positive and constructive action, because obviously continued government deficit spending in time must lead to

*Ours is a mutually dependent economy. Agriculture is dependent upon industry and commerce, and vice versa.*

*The record of war and post-war cycles shows this interdependence clearly.*

a nation-wide spiral of inflation. (This problem is extensively analyzed in Chap. XVIII.)

### *Importance of a High Level of Industrial Employment*

***What is the basis for really constructive action to break this cycle?***

What is the proper basis for such constructive action? One of the main factors of a healthy agriculture and so an important element of this basis, is a healthy state of industry. Total pay rolls in goodly proportions are of great importance to agriculture. They are essential for the purposes of

***The basic factors of a healthy agriculture include a high level of industrial employment.***

- (1) supplying consumer purchasing power for agricultural products;
- (2) providing occupational outlets for those in rural districts who do not care to farm or are not adapted to farming; and
- (3) having large quantities of industrial goods available for exchange for farm products.

***This is essential (1) to supply consumers' purchasing power, (2) to maintain nonfarm occupational outlets, (3) to furnish ample industrial goods to exchange for farm products.***

*Consumer Purchasing Power.* Low consumer purchasing power during the decade of the thirties was agriculture's number one problem. Persons in the low-income brackets spend more for food as their incomes increase. Expenditures per capita in the middle brackets increase as income increases but in a much smaller amount and proportion.

*Nonfarm Occupational Outlets.* Enough has been said to establish the point that agriculture needs—must have—a generous supply of occupational outlets in cities for those rural youth who are not attracted to farming. Failure of industry to absorb the rural surplus population during the depression tended to back up on the land more people than farming was able to support. Labor-union policies which restrict industrial opportunities are a serious barrier to successful farm migration.

*Large Supplies of Industrial Goods to Exchange for Farm Products.* Fewer people and more industrial goods on farms would improve greatly the peacetime agricultural situation. A large supply of industrial goods to exchange for agricultural products is dependent upon fairly full



industrial employment in the production of these goods. Hence, it is to the farmers' interest that industrial production be maintained in order that there may be more industrial goods available to exchange for more farm products. Full employment of industrial plants and full use of farm plants are far more desirable than a reduced output from each.

One of the great dangers is that labor will price itself out of the market now that the demand for war goods has ceased. There are reasons to fear that wages and farm prices will remain so high that consumers cannot afford to purchase sufficient goods to keep all available workers employed. The government-supported price program may have a temporary effect in keeping up farm prices, but it is doubtful that it can do so beyond the normal competitive front for very long.

Wages paid to labor are the most important single element of cost of the goods which the farmer purchases. Wage rates in industry, in transportation, and in middlemen's services determine in large measure the prices of things the farmer buys. Something over two thirds of the national income goes to salaries and wages.

Practically everyone agrees that farm prices which are so high that people will not buy do not offer a solution of agriculture's problems. High wages with few employed do not meet labor's difficulties. An idle plant is of small profit to the industrialist. Yet as long as any one of these conditions prevails it throws added burdens upon other segments of the economy. In a free economy farm prices will seek the level of consumer purchasing power. With fairly full employment this level promises to maintain a self-supporting agriculture. Without fairly full employment agriculture will again face difficulties beyond its control.

*Interferences with normal adjustments to market do not serve interests of labor or agriculture.*

*Industrial wages and farm prices, in a free economy, tend to adjust themselves to the consumers' market and assure full employment of labor and self-supporting agriculture.*

### *Building on Recognized Interdependence*

These further observations should be made on the relationship between agricultural and industrial prosperity, and implications of this relationship.

*Agriculture, as a smaller segment of the economy, is more sensitive to changes in industry and commerce than vice versa.*

*Over-all measures to benefit entire economy serve farm interests more than special government support of agriculture.*

*International peace and active trade be-*

1. It would be harder for agriculture to prosper without the cities than the reverse, since agriculture as a whole is economically considerably smaller than urban industry and trade. The cycle of the total value of farm production tends to follow the trend of industrial production much more than is the case vice versa.

2. There is no evidence that a billion dollars of additional farm income contributes any more to the national income and welfare than does a billion dollars of urban wages and salaries.

3. It is true that city people would starve if there were no farmers, but it is equally true that in a civilization where city industry is larger than rural industry the economic welfare of the latter is greatly affected by the prosperity of the former.

4. If government controls are exercised restrictively over the rest of the economy—especially industry, including both management and labor—then the potential for agricultural prosperity is lowered.

5. A real national prosperity program should include measures for agriculture as such and for industry as such. But the real crux of the national prosperity problem is the fact that over-all measures which beneficially affect the entire economy will contribute more to the welfare of a nation than will measures designed to help either agriculture primarily or industry and trade primarily.

6. If the country is in a depression, or threatened with one, farmers will benefit much more from measures to handle this problem as a whole, for the entire economy than from measures dealing with agricultural problems alone.

7. Agricultural organizations can confer most benefit to agriculture generally by doing everything possible to aid in establishing and maintaining a high level of industrial production and employment, and to encourage and support international collaboration to maintain international peace as a basis for international economic prosperity.

8. A high level of employment in the United States will be promoted, and is most likely to exist, when there is a high level of employment and activity in other countries.

tries and when there is an active flow of trade between nations.

*tween nations promote welfare of all.*

The foregoing observations apply not only to agricultural prosperity in the United States but to rural welfare throughout the world. Thus Karl Brandt, in his *Reconstruction of World Agriculture* (1945), says (p. 252):

Industrialization inevitably stimulates farming. . . . Any degree of industrialization will be accompanied by even greater efforts to improve agricultural output by better techniques, equipment, and efficiency. . . . Industrialization leads to a change in consumption levels as well as to a greater volume of purchasing power.

There are some who question the statement that agricultural prosperity can best—or even only—be found in a domestic market based on high industrial productivity and welfare. These critics point out that during the 1923-1929 period, while urban activity and employment as a whole were high, many farmers were going bankrupt. There were special reasons for the 1923-1929 situation which in no way negate the basic concept of interdependent prosperity between agriculture and industry.

*The record of 1923-1929 does not controvert the foregoing principles, since special conditions were then operative.*

1. Most of the farm bankruptcies of the twenties were due to an excessive debt situation arising out of the speculative 1917-1920 farm real-estate boom.

2. The farm situation would probably have been still worse if there had not been good business conditions. The experience of the thirties helps to confirm that probability and demonstrates the vital interest of farmers in a high level of industrial production and employment.

3. Farmers also suffered in the twenties from a drastic decline of inflated farm prices in 1920-1921, from overexpansion of agricultural plant, and from loss of export markets.

4. By 1927-1928 very substantial readjustments had been made, and agriculture would have made further substantial improvement if the depression of the thirties had been avoided.

#### AGRICULTURE'S ECONOMIC STAKE IN WORLD MARKETS

Another requirement for the attainment by agriculture of a self-supporting position is the development, in

*Another requirement of a*



*self-supporting agriculture is recovery of export markets.*

considerable measure, of lost foreign outlets for agricultural products. This loss of foreign markets has been so great that before the war we were importing, in terms of dollars, more foodstuffs than we exported. To be sure the war created outlets for all this nation could spare for shipment abroad, but these were not outlets of the kind that provided continuing postwar support for our agriculture. Peacetime world markets must be those in which the fellow who receives the goods pays for them.

Before the depression our farm plant was geared to the foreign market. The products of one tillable acre in six went abroad. For some products such as cotton, tobacco, and wheat, the percentage was higher. For certain products such as cotton, it seems obvious that for many years to come the United States will produce in excess of domestic requirements. From the enormous increase in dairy plant capacity in some areas during the last two years of the war, and from the enormous number of hogs running around the corn-belt states during the recent marketing seasons, it looks as if foreigners would have to be induced not only to use more cotton, but to eat more of our dairy and pork products after the postwar transition period is finally over; but increased foreign trade for our dairy products especially will be difficult to achieve.

*Trade is a two-way operation. Barriers must be lowered.*

It is not always an easy task to sell abroad at acceptable prices goods which cannot profitably be marketed at home. Our agricultural exports have been declining. Just before the outbreak of war in 1939, we were exporting the products of only 1 tillable acre in 15 as compared with in 6 some 10 to 15 years earlier. This unwillingness of foreigners to buy is a reflection, in part at least, of our own policies of high protection. The tariff has been a subject of political debate almost since the birth of the nation. It is still with us. It promises to become a burning issue again now that the war is ended. In recent years the tariff has been supplemented in many foreign nations by such powerful trade-restrictive weapons as embargoes, quotas and exchange manipulation.

As long as this country was a debtor nation, as it was up to World War I, it could export beyond the limit of

which it was willing to take goods in return. Citizens of other nations had furnished capital for the building of railroads and for the development of our industries. They accepted our goods in payment for the interest and principal of this debt. As long as that situation existed there was an acceptable farm market abroad for all we could supply.

But that situation has changed. During the interwar period, the United States was on the creditor, rather than the debtor side of the fence. Other nations no longer took our farm products in return for loans. They could pay for the goods we sold them only to the extent that we took their goods and services in return.

It is all too little appreciated that if a nation is to sell, it must buy. But farmers are not happy when the American consumer buys the products of foreign soils. They seem to be greatly troubled over agricultural imports. The American farmer stands to gain, however, as long as agricultural exports require more acres to produce than there are acres displaced by competing agricultural imports. (By competitive imports one refers to those commodities that can be efficiently produced in this country.) An analysis of the nature of our agricultural imports will serve to confirm that statement, subject to the qualification that the nature of the product also is involved. Thus, the importation of an acre's product of lettuce may be offset by the export of several acres of wheat. Such an analysis should go far in dispelling some of our fears of agricultural imports.

### *Analysis of Agricultural Imports*

During the fiscal year immediately preceding the outbreak of the war in 1939, agricultural imports into this country amounted to approximately 1 billion dollars—roughly equivalent to one seventh of our cash farm income.

The largest item was rubber, amounting to 15 per cent of the total. Farmers are heavy users of that item. The next item was coffee, amounting to 12½ per cent of the total. Farmers are heavy drinkers of coffee. Silk was

*The United States, when a debtor nation, could sell more than it bought. Now the tables are turned. Our export prospects must be appraised accordingly.*

*American farmers gain by agricultural imports if they displace less acres than required for products exported in return.*

*Two thirds of 1939 agricultural imports were largely noncompetitive—including rubber, coffee, sugar, bananas, tea, spices, etc.*

third, accounting for 11 per cent of all agricultural imports. Add to these three items such commodities not produced in this country as bananas, carpet wool, tea, and spices, and one has accounted for 56 per cent of our agricultural imports on a noncompetitive basis. This leaves 44 per cent in the competitive class. But of this 44 per cent one fourth consists of sugar, a doubtful competitive item. If one adds sugar to the noncompetitive list, then two thirds of our agricultural imports consist of products not grown at all, or not grown economically, in the United States.

The point to be emphasized is that the value of our agricultural exports has always exceeded the value of competitive agricultural imports (except perhaps in 1936 and 1940), and the more we restrict the entry of these competitive imports, the more are we likely to restrict our sales abroad. The more we restrict our sales abroad, the greater will be the competition on the domestic market by farmers who formerly produced for export.

### *A Liberal Foreign-trade Policy Required*

*Every attempt to aid agriculture by tariff restrictions has been accompanied by increased rates on manufactured goods, to the net detriment of agriculture.*

Government pricing policy, as in the case of cotton, may drive American goods out of foreign markets; or the American farmer may preserve the home market for the American producer by keeping out all competitive imports. In either event the American farmer will have a domestic market burdened with the responsibility of absorbing the total domestic production, and that may lead to a sadly depressed market. Farmers should also remember that in the past every attempt to aid agriculture by raising the tariff on their products has been accompanied by increased rates on industrial goods. This policy has operated to the disadvantage of farmers in two ways. It has raised the prices of manufactured goods they buy, and it has reduced the amounts of agricultural products sold abroad by further preventing foreigners from selling manufactured goods to us.

It seems clear that agriculture has far more to gain than to lose by a more liberal foreign-trade policy. One thing seems certain, if outlets abroad are not developed



agriculture is faced with the painful alternative of permanently reducing the size of its farm plant. Such a reduction would probably mean a depressed agriculture for many years to come. A depressed agriculture means a lower scale of living in rural districts. Scale of living is agriculture's economic stake in world trade. This is not the same as saying that international trade alone will make American agriculture prosperous. It does imply, however, that this country cannot have a prosperous agriculture without engaging in a goodly volume of world commerce.

*Farmers have more to gain than to lose by a more liberal foreign-trade policy.*

### HISTORY OF EARLIER AGRICULTURAL PROGRAMS

Up until the end of World War I, the major share of public attention devoted to agriculture, as reflected in the activities of the Department of Agriculture and the state agricultural colleges, had to do with management and cultural practices on the farm (except for large irrigation projects in certain western areas). These were matters which originated and operated largely within the line fences of the farm. They were production problems. They will always loom large to the farm operator. He will ever be confronted with the necessity of adopting new ways and means of increasing his efficiency and of reducing production costs.

*Prior to World War I public aid to agriculture was mainly in promotion of efficiency in production by free advice.*

During recent years, however, there has been a shift in emphasis. The role of government in its relation to agriculture has notably changed, largely at the instance of the farmers, or at least of farm representatives. Production efficiency gave way to managed economy. The government abandoned its traditional policy of helpful advice and counsel on a take-it-or-leave-it basis. In its stead, a system of rewards and penalties has been introduced. The activities of official "planners" have tended to dominate the scene. One of the outstanding developments in agriculture during the decade preceding World War II was the quest for "parity prices" and "parity income" through legislation.

*The emphasis has shifted toward a government-managed economy, especially since 1933.*

During the period from 1933 to 1940, the government spent some billions in search of "a sound agricultural

program." Up to the beginning of the war emergency it was still searching. Until the advent of lend-lease buying the government was still short of its announced objective. This analysis attempts to trace some of the evolutionary developments of the relation of government to agriculture as reflected in the price-boosting phases of peacetime agricultural programs. Experience with these programs may be helpful in avoiding some mistakes in an attempt to place agriculture on a self-supporting basis in the post-war years.

*The decline in the relative position of agriculture has been partly an inevitable incident of national progress,*

The relatively declining position of agriculture in our national economy raises some very pertinent questions. Much of this relative decline has been nothing more than the progress of the nation as a whole. The demand for agricultural products will increase if average nutritional consumption is increased, or if industrial use of farm products grows. Nevertheless our wants as to food—our very ability to consume food—are necessarily limited even though large sections of our population admittedly have not yet reached a high level of food consumption. But there are no such limits on most of the other elements that enter into our scale of living. In other words, insofar as the products of our farms are concerned, we are constantly up against a ceiling which does not change, except for the growth of population, higher wages for those in the low income groups, and increased industrial uses of farm products. In the case of industrial production there is no such ceiling. With the progress of the nation, therefore, it has been inevitable that agriculture would contribute relatively a smaller percentage of our total output.

*aggravated by the change in use of power on farms, requiring more cash crops.*

The change that has taken place in the relative position of agriculture has also been aggravated by another development. This is the change that has taken place in the type of power used on farms. In the earlier days, when horses and mules were used, the farm could be largely self-sufficient insofar as power was concerned. With the development of gasoline engines this was no longer necessarily true. Now the farmer must be prepared to buy power fuel. The result—and other factors have also worked in the same direction—was to necessitate a large

percentage of cash crops. It necessitated also a sharp reduction of the areas devoted to hay and other feed for work animals. This shift in production had the important incidental effect of curtailing the supply of natural fertilizer and increased the demand for artificial fertilizer, thus creating an additional demand for cash crops.

### *Beginnings of Farm Relief<sup>1</sup>*

Our government has always been sympathetic toward farmers. Such an attitude was to be expected in the days when the great bulk of the nation's population was directly dependent upon the soil for a living. But it is a little surprising to observe that as the agricultural population becomes relatively smaller the generosity of government is more notably increased.<sup>2</sup>

To be sure, agricultural legislation has not always resulted in helping agriculture. Yet it is fairly certain that the intent to help agriculture has always been present. The Homestead Act of 1862 is a case in point. It is rather generally agreed that some of our present difficulties have their roots in this act. It brought into cultivation millions of acres that should never have been exposed to the plow. The government meant well. Farmers wanted cheap land. The government gave them cheap land. (It may be noted also that railroad subsidies and the Timber and Stone Act also stimulated the bringing of many millions of acres into cultivation.) The trouble arises from the fact that the land was not only cheap, but some of it has proved to be unproductive over a period of years because of inadequate rainfall. The problem now is that of retiring this land from use as farms.

*Our government has always been disposed to help farmers, more notably since farming became a minority occupation.*

*The Homestead Act and some later measures, however, brought much unsuitable land into cultivation.*

<sup>1</sup> Asher Hobson, "The Evolution of Farm Relief," *The American Scholar*, vol. II, No. 4, Autumn, 1942, pp. 495-501.

<sup>2</sup> It would seem that further study is needed of the economic effects of World War I upon agriculture. A comparison of real farm prices with real hourly earnings of nonagricultural workers indicates that the latter began a marked rise about 1917, while the former began a sharp drop about the same time. See Black and Gibbons, "The War and American Agriculture," *Harvard Review of Economic Statistics*, February 1944, especially Charts 25 and 26 on pp. 22 and 23. It is this contrast which may have caused much of the demand for "farm relief" by government.



*Easy Access to Land*

Early agricultural policy was devoted almost wholly to promoting land settlement. The price of government land was low—seldom exceeding \$1.50 per acre—and during some periods it was sold upon liberal credit terms. Its cheapness and easy terms were not enough. Private ownership of land was made still easier by a series of official programs designed to facilitate settlement. The more important of these are familiar. They are listed here merely to emphasize their place in the evolution of agricultural policy.

The Indians were concentrated in order to make way for the white settler. By the preemption law, "squatter" who outran the surveyors were permitted to retain possession of their holdings. The railway land grants played an important role. As someone has said, "they promoted the building of railroads from places where no one lived to places where no one wanted to go." It was assumed that settlement would follow the rails. It did. The master stroke of the nineteenth century in matters of agricultural policy was the Homestead Act (1862) reducing the amount of money payment required of the settler. The government disposed of something over 100 million acres of land under this act and its subsequent extensions.

*The conservation movement checked the urge to transfer unsuitable land to agricultural use.*

The treatment of forest lands and the conservation movement in general stand out as exceptions to the government's urge to transfer land from public to private ownership. During the period 1891-1907, some 147 million acres of forest and grazing lands were removed from the possibility of use by private enterprise.

*Education and Research*

*The promotion of agricultural education, research, and extension service has been in the long run most*

Beginning with the passage of the Morrill Act (1862), the federal government set out on what later became an energetic and sizable effort to promote agricultural education, research, and college extension activities. Through the donation of public lands, it provided for the establishment in each of the states of an institution of higher learning known as a "land-grant college," for the teaching of agricultural and engineering subjects.

By the Hatch Act (1887), Congress provided that federal money be made available annually to each of the states for agricultural experimental and research purposes.

The Smith-Lever Act of 1914 placed on a permanent basis the agricultural extension service with its corps of county agricultural and home demonstration agents.

These original acts have been augmented and supplemented. Funds, especially for research and extension purposes, have been substantially increased from time to time. Agriculture stands out among the economic groups as the one upon which the government has been most lavish in its efforts to establish a high plane of operating efficiency.

Although we have properly listed education and research aid in the field of agriculture as a form of "farm relief," yet it might also be argued with some justification that from a long-range economic standpoint this particular type of relief is really a subsidy to consumers instead of to agriculture. Certainly the first farmers to adopt improved practices growing out of such government expenditures receive benefits for a time. But once the practices are generally adopted and farms are again producing in a comparable manner, the principal benefits may flow to consumers. In fact, there is considerable evidence to show that agricultural extension work was originally sponsored by consumer groups.

### *Restraints on the Other Fellow*

The Granger movement in the seventies crystallized farmer demands that the railroads and other "monopolies" be curbed in the interests of those who dealt with them. Partly, perhaps predominantly, as a result of these demands, Congress passed the Interstate Commerce Act, the Sherman Antitrust Law, and the Pure Food and Drug Act. Although legislation of this sort does not deal directly with agriculture, it may very properly be listed as a distinct part of agricultural policy. These restraints are considered in some detail in other chapters.

### *Liberal Government Credit*

One of the earliest of the official agricultural programs was the sale of publicly owned lands at low rates on

*The Interstate Commerce, Antitrust, and Pure Food acts were related to agricultural policy.*

*In 1916, with the Federal*

***Land Bank Act, the government began to supply farm credit in a large way.***

easy terms. But it was not until 1916 with the establishment of the Federal Land Bank system that Uncle Sam entered the field of supplying credit to agriculture in a large way, and for purposes other than purchases from the public domain.<sup>1</sup> This policy has been expanded to cover short-term marketing credit, production credit, and loans to agricultural cooperative associations for the conduct of their business. In the cases of feed and seed loans and loans made by the Farm Security Administration, the government extends credit to many who have no credit standing under the ordinary interpretation of that term.

No longer can it be said that farmers as a group suffer from a lack of credit facilities designed to meet their needs. Rather the question has become whether farmers have not been the victims of too much and too easy credit, victims just as much of recent government credit policies as farmers of a generation ago were victims of the poor conditions which were largely nurtured on private credit and led to a multitude of financial failures.

#### *Aid without Subsidy or Compulsion*

***Thus federal aid to agriculture has a long history.***

The above sketch covers in brief the first one hundred or more years of official agricultural policy in this country. It is believed by many that federal agricultural policy was born in the 1930s. Such is not the case. Our government throughout its existence has been mindful of agriculture. Measured by the standards of the time, it can be said with acceptable accuracy that the government has done more to promote agriculture than any other profession, occupation, or calling. Even the advance of medical science has received no such encouragement, yet health is considered a heavy public responsibility.

Truly, even before the day of the McNary-Hauger the export-debenture, and the domestic-allotment discussions in the 1920s and before the days of the more recent

<sup>1</sup> Practically the entire capital of the federal land banks was provided by the federal government. Gradually, however, the borrowing farmers replaced the capital and by 1929 practically the entire capital originally advanced by the government had been replaced by farmers' subscriptions. During the depression, however, the government provided RFC loans to the banks, which enabled them to make more loans to farmers.



Federal Farm Board and the Agricultural Adjustment Administration, agriculture occupied a favored position in the eyes of federal legislators.

Perhaps the reason why the earlier acts of government are not looked upon by many as matters of policy is their mildness as compared to more recent programs. They involved no direct monetary rewards. Compulsion in connection with farm operations was lacking. The aim of Congress seems to have been the promotion of the family-sized farm in an atmosphere of competitive private enterprise. The farmer was assisted in the acquisition of land. He was protected, in a measure, against detrimental activities of powerful economic groups with which he must deal. He was furnished with much friendly advice on a take-it-or-leave-it basis. Yet in the last analysis his decisions were his own. He went ahead pretty much under his own power, reaping the gains and bearing the losses. Government assistance was extended largely on a self-help basis, for the purpose of enabling farmers better to do their fundamental job of producing food for the nation. Recent policies depart markedly from this philosophy.

*But, down to World War I, government aid to agriculture involved no direct subsidies and no coercion.*

### THE HECTIC TWENTIES

World War I lifted agricultural prices to soaring heights. The latter part of 1920 saw them drop with a resounding crash. The severity of the economic shock is indicated by the figures in Table 3.

TABLE 3

	1920	1921
Cash farm income.....	\$12,600,000,000	\$8,100,000,000
Farm price index (1910-1914 = 100).....	211	125
Farm purchasing power (1910-1914 = 100).....	111	67

*The crash of farm prices and values in 1920 brought increasing pressure for more direct government aid.*

Congress began to hear from farmers. The three general farm organizations of national scope had established permanent legislative offices in Washington in order to provide a better sounding board for the farmers' demands. The demands were many and insistent. Congress

*Farm organizations, a Congressional joint commission, and a Senatorial "farm bloc" backed the demand.*

*More federal farm legislation was passed in 1920-1932 than in all years previous.*

*This included provisions for more research, information, and extension service; more and easier credit; more controls over handling of farm products.*

*Also, farmers' cooperatives were exempted from antitrust laws and a farm representative was added to FRB.*

and the Administration became deeply concerned. There is much evidence of this concern. Congress set up a Joint Commission of Agricultural Inquiry with instructions to report within 6 months on "The Agricultural Crisis and its Causes." The report covers some 1,300 printed pages of ordinary book size. That was in 1921. Early in 1922 President Harding called a national agricultural conference to which 439 delegates from all parts of the country were invited. A third manifestation was the organization of the "farm bloc" in the Senate—the first of its kind.

Some students of the subject are inclined to look upon this period as the real beginning of the government participation in agricultural affairs. Without doubt it is the period in which the government began to consider ways and means of participating more directly and more actively in agricultural matters. Discussions began to wander from the self-help principle to the possibility of the government's taking a hand in the control of farm prices.

There is a real basis for the statement that Congress passed more legislation on behalf of agriculture during the period 1920-1932 than during its entire previous existence. Not only did the government expand the output of economic and scientific information, but this period saw a considerable increase in the "control of others" on behalf of agriculture. To mention a few examples by way of illustration but without attempting to appraise the merits and defects of particular measures:

- Packers and Stockyards Act
- Grain Futures Act
- Filled Milk Act
- Cotton Standards Act
- The Produce Agency Act
- The Perishable Agricultural Commodity Act

It was during this period also that Congress departed from its usual practice by granting to agriculture what were looked upon at the time as special privileges. In 1922 the Capper-Volstead Act was passed to assure that the normal activities of agricultural cooperative associations were not to be deemed in contravention of the antitrust

aws. During the same year agriculture was granted a representative on the Federal Reserve Board. Yet by far the greater bulk of legislation was more of the usual provisions for research and extension, increased quantities of information, more credit on easier terms, more rigid controls over those handling farm products.

### *The Prelude to Price-boosting Legislation*

But legislation of this sort, no matter how profuse, was not enough. It did not answer the farmers' demands. They were convinced that their trouble was low prices and that the cure was higher prices for farm products. Hence, at the beginning of the extended, not to say bitter, controversy in Congress over bills designed to raise the domestic prices of agricultural products above world price levels.

The discussions began with the introduction of the first McNary-Haugen bill in 1924, embodying the *equalization fee* principle. According to this proposal the domestic price was to be based upon a "fair exchange value"—the ancestor of the parity price concept. The fair exchange value was one that represented the prices farmers received for their products in relation to the prices paid by farmers for things they bought, during a designated previous period. The designated base period was to be one in which farmers as a whole were believed to have been most prosperous. Surpluses were to be exported at world prices. The "losses" on exports were to be made up by the collection of a small fee on each unit of product grown. A small fee upon the whole production would provide a large fee on the exported portion.

Another two-price proposal advanced during this period was the *export-debenture* plan, which proposed to pay subsidies to exporters of designated farm products. The subsidies were to be paid in certificates which would be valid for the payment of customs duties on imports. In short, it was an export subsidy with administrative trimmings.

The *domestic-allotment* proposals of the early thirties attempted to accomplish the same results by a different approach. They were based upon rewards to those farmers

*Price-boosting proposals were strongly pressed, including equalization fee, export debenture, and domestic allotment plans.*



*These all involved separation of domestic from world market as to prices.*

*Although none of these proposals was then enacted, the Agricultural Marketing Act (1929) set up the Federal Farm Board, to aid cooperatives and try to peg prices—for which it spent 250 million dollars in vain.*

who reduced their acreages of surplus crops in keeping with the demands of the domestic market. Instead of exporting the surpluses at a loss, the thought was to eliminate surpluses. Individual farms were to have production allotments. Rewards were to go to those who kept within the allotments. Funds with which to pay the rewards were to be raised by a fee which in later legislation turned out to be a processing tax.

It will be observed that the basic principle involved in each of these proposals was the same: a separation of the domestic-market from the world-market price with a view to raising domestic prices artificially. The differences are in methods. None of these proposals found its way into law during the twenties. Yet few defeated proposals have had such tenacity in legislative life as was exhibited by the McNary-Haugen equalization fee plan. It was twice passed by both branches of Congress, and twice vetoed by the President. Another matter worthy of note is that all these proposals were later put into practice, in one form or another, by the Agricultural Adjustment Administration.

### *The Federal Farm Board*

It became obvious that price-boosting legislation could not be passed over the President's veto. The Agricultural Marketing Act establishing the Federal Farm Board was the result (1929). It was openly a compromise measure—a sleeping powder administered to proponents of direct price-boosting schemes. The Board was given what at that time was considered an exorbitant sum—a revolving fund of one-half billion dollars. It was instructed to drive the agricultural depression to cover. Its weapons were aid to farmer cooperatives through loans at most favorable rates of interest, and as a last resort "stabilization operations" for the purpose of pegging prices. All told, the Board suffered losses of about 250 million dollars. It failed to fulfill its official mission. The failure can hardly be laid at the door of the Board. It was given an impossible task. Farmer cooperatives, no matter how numerous, robust, and healthy, could not reasonably be expected to cope with a depression arising from causes quite beyond their sphere of influence. Stabilization operations during a p

riod of falling prices and also without the power to influence production proved to be a hopeless undertaking. Later attempts to accomplish the same results seemed successful only because prices in general were rising.

The demise of the Farm Board in 1933 brings agricultural policy to the beginning of a new era.

### RISE OF A CONTROLLED ECONOMY

In 1933, agriculture entered the first stages of what later developed into a controlled economy. "Planning" was the term most commonly used in connection with the new turn of affairs. Since the new role of government was a marked departure from its traditional activities, much effort was expended by those in charge of the blueprints on an apparent or superficial attempt to harmonize their plans with the democratic form of government. One detects in these discussions a tendency on the part of those administering the programs to define democracy as "the way we do it." The rather persistent trend toward the concentration of more and more control in the hands of the government makes this question one of increasing importance.

Democracy is difficult to define. Nevertheless, one can say with reasonable accuracy that many of the agricultural action programs of government do not harmonize with traditional economic thought upon which our form of government was based. The traditional economic concepts as regards our internal economy were freedom of production, freedom of trade, and freedom of markets. Competition was the dominant note, and competitive price, with noticeable exceptions in the field of public utilities, was looked upon as the economic regulator. The government's action programs discard, in considerable measure, this philosophy of individual judgment as outmoded and ineffective in coping with the situations of the day.

### *Complications and Contradictions of Government Control*

Generalizations are dangerous. It is not easy to characterize by one term the various action programs enacted into laws during the thirties. Their contradictions baffle

*In 1933 government undertook larger control.*

*Though trying to reconcile control with democracy, it largely discarded free competition as economic regulator.*

*Confusion resulted from*

*conflicting policies, as export subsidies vs. reciprocal trade agreements,*

*restraint of production vs. antitrust prosecution and irrigation projects.*

*In general, the farm program involved ever-increasing extension of government functions through legislation and administrative decrees.*

one who attempts to reduce these programs to a common denominator. To illustrate:

One arm of the government attempted to promote agricultural exports, while another arm attempted artificially to boost domestic prices of agricultural export commodities above world levels. The Department of State attempted to develop foreign trade through reciprocal trade agreements at the same time that the Department of Agriculture subsidized exports. Export subsidies tend to nullify the effects of accepted trade promotion policies. They are outlawed by our own antidumping legislation.

The Department of Agriculture attempted to set up a mechanism for the control of agricultural production and the influencing of prices, which, if successful, would have reached an all-time high in monopoly endeavor. While the government was thus engaged in restraint of trade and the encouragement of monopolistic practices, the Department of Justice was embarking upon a program of widespread and highly publicized antitrust prosecutions. Price manipulation through production control is quite as monopolistic when exercised through government constraint as when practiced by private individuals or corporations. In fact, it is doubtful that monopoly power can exist in the United States without the backing of government.

One government agency restricted production in old, highly developed agricultural regions, while a different agency was bringing under irrigation over a million acres of raw sagebrush land.

Probably the one valid generalization is that the agricultural programs were characterized by ever-increasing extensions of the functions of government through legislation, and by administrative decrees and controls—contrasted with rather limited government action embodied in traditional economic thought, and, one may add, embodied in our traditional form of government.

The competitive system has been compared to an athletic contest, in which the government furnishes the machinery for formulating the rules of the game and serves as umpire in applying those rules. Agricultural planning



assigns to government a far different role. It not only furnishes the machinery for formulating the rules and seeing to their enforcement, but upon occasion modifies and extends them while the game is in progress. It selects and disqualifies players, and at times representatives of government appear in player's uniform.

Although one may have no inclination to defend the abuses of the old concept where the strengths of competitors were at times so unequal as to cancel the contest, one may well insist that the new style of play and management may not prove a blessing to agriculture, or at least should not be accepted by agriculture without close analysis.

The rapid and widespread extension of government functions was the outstanding feature of agricultural planning legislation. The term "controlled economy" is a fairly accurate characterization of this development. It is uncoordinated control, to be sure; nevertheless, it is action designed to transfer production and marketing decisions, a goodly measure, from the individual to the government. For a time such so-called "planning" had widespread support among the farmers, but there has been increasing evidence of late that they are more and more turning against it, perhaps to some extent because of the higher prices of recent years.

Before analyzing particular aspects of the agricultural planning legislation of the thirties it is necessary to consider their motivation. In general, it may be said, the nation as a whole believed that there was an "agricultural problem" and that the government should "do something about it." Various measures were tried in a real belief that they would help, but without full regard for their effect upon individual freedom and initiative or upon the economy as a whole. Experience has shown that these measures do not accomplish their real purpose—to improve the welfare of agriculture as a whole.

#### *Agriculture under the AAA*

This analysis of the price-boosting activities of the Agricultural Adjustment Administration is limited to the period 1933-1940. It is believed best to omit the war years

*While controls were uncoordinated, production and marketing decisions were largely transferred from individuals to government.*

*The motive was the nation's wish to try to solve the "farm problem," but experience has shown the inappropriateness of the measures used.*

with their rapidly shifting emergencies. The war, beginning with the defense program and lend-lease purchases brought about marked changes in the economic position of agriculture. It required, with respect to agriculture, a reversal of government policy. The encouragement of agricultural production, with a view to replenishing stock piles, replaced policies designed to curtail production and remove surpluses. Pressure was shifted from the brake pedal to the accelerator. But we return in our analysis to the prewar period.

*The Secretary of Agriculture through the AAA (1933) was given sweeping powers in order to achieve "parity prices."*

The year 1933 brought with it new styles in government procedure. Agriculture received an entirely new outfit, different from anything it had ever worn before. This was the beginning of a large body of legislation commonly referred to as the AAA. The outstanding characteristic of the first Agricultural Adjustment Act was the sweeping authority given the executive branch of the government. The Secretary of Agriculture could, for instance,

- lease land
- deal in cotton futures
- restrict production
- restrict amounts offered for sale
- license and supervise processors and handlers of farm products
- purchase surpluses
- levy processing taxes in amounts of his own setting

The 1933 act provided also for regulation of fluid milk markets involved in interstate commerce; in the summer of 1940 regulation of milk prices existed in all states. The program of fluid-milk control, both federal and state, cannot be considered a real success, owing to the inability to get prices to go down as well as up and neglect of the large part which labor costs play in milk prices. (See *Fact and Fancy in the TNEC Monographs*, pp. 547.)

The most significant change since 1933 has been the government's direct participation in farm management.

This participation covers a wide range. In the interest of brevity, the discussion deals only with procedures designed directly to influence agricultural production and prices. Price increases were the prime motive. "Parity prices" were the goal. Parity was defined in the Agricultural Adjustment Act of 1933 as that level of agricultural prices "that will give agricultural commodities a purchasing power with respect to articles that farmers buy, equivalent to the purchasing power of agricultural commodities in the base period [August 1909 to July 1914]." <sup>1</sup>

In the beginning, weighty emphasis was placed upon the curtailment of production. As will be shown later, and as generally agreed, the program of restricting production did not come up to expectations as a booster of farm prices. This is one explanation for constant changes and additions. Substantial amendments to the act were made during each of the first 6 years of its existence. Furthermore, a large portion of the original act was declared unconstitutional in 1936, partly on the ground that production control was not a function of the federal government.

Beginning with the new act of 1937, emphasis was nominally shifted from acreage restriction to so-called "agricultural conservation." The change in practice, however, was little more than a change in name. The designated soil-depleting crops were much the same as those of restricted acres under the old act. Under the new act rewards were granted for growing less of the soil-depleting crops.

The act of 1938 was the basis of the programs which continued in substantial operation until Pearl Harbor. Its main addition was the "ever-normal granary," a plan for accumulating the surpluses of fat years for use in lean years. It was originally intended to be operated through governmental buying when crops were large and selling when crops were short. In practice, however, pressure groups in Congress made this procedure unworkable, for they compelled the adoption of price-supporting policies

*The AAA program of restricting production was ineffective to this end in 6 years of operation.*

*Many changes were made, including change of emphasis to soil conservation, following Supreme Court decision in 1936, but practice was not essentially different.*

*The "ever-normal granary" plan (1938), for accumulating and disposing*

<sup>1</sup> This 5-year period was believed to be the most favorable in our history from the point of view of farm prices in relation to nonfarm prices. Later investigations cast doubt upon this belief. See Black and Gibbons in the *Harvard Review of Economic Statistics*, February 1944.



*of surpluses, was less successful than normal operation of grain markets, besides requiring controls conflicting widely with freedom of enterprise.*

under which great stocks of farm products were accumulated but were not disposed of when bountiful crops appeared. Evidently, if the farm bloc in Congress was sufficiently powerful to force Congress to authorize price supporting purchase of farm products for storage, then the group was per se powerful enough also to perform later the lesser task of preventing the government from selling the stored products and thus lowering the prices.

Before the "ever-normal granary" plan was adopted, private speculators were far more successful in coordinating supply and demand than the government ever has been. The notion that such speculation has generated unnecessary fluctuations in agricultural prices finds no support in careful studies of the great produce exchanges. Speculation in commodities, if freed from public disapproval and unreasonable governmental restrictions, can be relied on to make surpluses available in lean years far more effectively than the "ever-normal granary." Such speculation, moreover, is a logical part of the free-enterprise system, whereas the "ever-normal granary" plan initiates a whole series of government controls and restrictions. Acreage restrictions, price controls, and the like, which have developed in connection with the federal control program, inevitably entail control of other prices, and such control is in direct conflict with the system of free markets and free enterprise.

### *Main Features of Effort for "Parity"*

The main features adopted with a view to raising agricultural prices to parity levels were:

*Efforts to limit production were partly successful but failed to achieve parity prices.*

*Production control.* The desire was to reduce the production of the surplus crops—designated in the acts as "basic"—by some 40 to 50 million acres. These figures represent well over a tenth of the total area in cultivation. The first year's accomplishments were considerable. Wheat acreage was reduced by some 7 million acres. Over 10 million acres of growing cotton were plowed under, and 100,000 little pigs and 200,000 prospective mother sows

were slaughtered. The AAA was in time successful in securing the withdrawal of something over 35 million acres from the growing of designated "basic" crops.

During the first three full years of the adjustment programs a total of nearly 1.5 billion dollars was expended. Most of this was paid to farmers directly in the form of rental and benefit payments, which were a reward for compliance with the provisions of the program. The lion's share of the rewards under the earlier operations of the programs went to the growers of three of the five designated basic commodities: cotton, corn, and wheat. Other farm producers, such as dairymen, poultry raisers, beef producers, mutton and wool producers, and fruit and vegetable farmers, were left largely to shift for themselves. The tendency during later years was to broaden the basis of payment in order to spread the rewards among a larger number of farmers.

Limitations on production failed to lift prices to parity level. Hence the necessity of creating supplementary price supports.

*Commodity loans.* One of the most effective of the supplemental price props is the commodity loans. These are nonrecourse loans. That is, if the market price of the commodity falls below the loan value, the farmer does not have to make up the difference. In this case the government takes over the commodity and the farmer receives the loan value. On the other hand, if the market price is above the loan value, the farmer sells his product in the market, pays off the loan, and pockets the difference. Thus the farmer can never lose and the government can never gain. Such loans are made to farmers participating in the reduction programs. Their purpose is to place a "floor" under prices. Originally they were applied to the five basic commodities. They are now applicable to a fairly sizable list of agricultural commodities. The amounts loaned are as high as 90 per cent of the parity price of the commodity. The loan rate generally—but not always—establishes a minimum below which market prices do not fall. One of the serious peacetime difficulties was that political consider-

*Additional price supports were created. Commodity loans were one of the most effective. They might amount to 90 per cent of parity price.*

*Export subsidies were used in order to work off surplus holdings.*

*Surplus commodity purchases were made for relief agencies, commercial by-products, etc.*

*Congress provided funds for parity payments to meet part of the*

ations at times forced the loan rate above world-market prices. This reduced exports and increased domestic surpluses.

*Export subsidies.* These subsidies are largely creatures of the loan program. Loans above world-market price, as just stated, curtailed sales abroad and increased the surpluses of both wheat and cotton. Export subsidies were introduced for the purpose of promoting foreign sales as an attempt to work off these increased surplus holdings. The loan program was a prop designed to overcome weaknesses of crop control. Export subsidies were introduced to offset some of the disasters of the loan program. Wheat, flour, corn, cotton, and nuts received the greatest sums for this purpose. Some 121 million bushels of wheat and over 17.5 million barrels of flour were sold to foreigners at government-subsidized cost of over 30 million dollars on wheat and 18 million dollars on flour.<sup>1</sup>

*Surplus commodity purchases.* This program was initiated with a view to strengthening prices by removing a portion of the supply from the regular marketing channels. Some of these purchases were given to the needy through established relief agencies, and large quantities also were distributed through the stamp plan and the school lunch program, both of which methods of disposal, of course, tended to disrupt the operations of a free market. Another outlet is diversion of commodities into commercial by-products. In a few instances, the government purchased for the purpose of maintaining a "pegged" price. The buying of butter upon different occasions had this end in view. It is safe to conclude, however, that during peacetime the urban relief aspects of commodity purchases were far more significant than was their influence on agricultural prices.

*Parity payments.* These are designed to make up for the deficiencies of other price-boosting methods. They are payments to farmers equivalent to the difference between the amount realized on the market for his commodity and the parity price. Parity payments have been confined

<sup>1</sup> G. S. Shepherd, *Agricultural Price Control*, p. 161, The Collegiate Press, Ames, Iowa, 1945.



the basic commodities: cotton, peanuts, corn, wheat, tobacco, and rice. They are limited by the amounts annually appropriated by Congress. During the period under discussion, Congress never supplied funds sufficient to cover the whole of the difference between the market and the parity price of the basic commodities. In 1940 around 225 million dollars were distributed for this purpose.

*Market quotas.* The most sturdy of the price-elevating props to acreage control were the market quotas. They represented a shift from limitations on acres planted to limitations on amounts marketed. The Supreme Court in 1939 pronounced this to be a legal procedure. If a minimum of two thirds of the farmers voting favored market quotas, then each farmer growing that commodity must restrict the amount marketed to his designated allotment. The individual farmer was thus made subject to the majority domination. Amounts sold in excess of this allotment were subject to a heavy and what amounted to a prohibitive tax. Up to 1940 market quotas had been applied to cotton, wheat, and certain types of tobacco. These quotas are the most drastic and effective limitation on marketing, and therefore on production, that have yet been put into effect in this country. The quota device, just as all the others, reflects a basic rejection of a free price system.

There are other action programs pertaining to agriculture. But those described above are the most important from the standpoint of attempting to influence prices through the reduction of supplies. What have been the results? Did they reduce supplies? Did they markedly increase prices?

### *Total Agricultural Production Increased*

The 1940 production of wheat, corn, and rice was greater than the average production for the 10 years ending in 1939. Of the basic commodities, only cotton and tobacco showed a decline in production at the end of the peacetime period of the programs. But, because of the tendency to shift from controlled to other commodities, it is important to analyze the effects of control measures upon total agricultural production.

*difference between prices received and parity prices of six basic commodities.*

*Market quotas on cotton, wheat, and tobacco, when authorized by two thirds of growers, restricting marketing to allotments designated.*

***Control measures had little or no effect on total farm production. The volume in 1937 set an all-time high.***

***Restrictions must be applied to all farmers and be compulsory to be effective.***

***In the last year of the wheat acreage-restriction program acreage increased over 1928-1932 average, though production areas may have shifted.***

Available evidence indicates that control measures had little or no effect upon total agricultural production. The official index of volume of total agricultural production shows 1937 to have set a new all-time high for volumes produced up to that time. Agricultural production for the four years 1937 to 1940 was the highest for the crop-control era. Three of those years equaled or exceeded any previous production records.<sup>1</sup> One can find no evidence that total agricultural production would have been higher in the absence of acreage restriction.

The experience of 8 years indicates rather conclusively that programs designed to control agricultural production break down of their own accord unless applied universally and unless supported by the more compelling forces of government. Enforcement took the form of punishment for violations in the case of market quotas and generous money payments for compliance as applied to other phases. But these are not enough. If planning is to be successful as a price-controlling force it must go further—much further. If there are to be payments which tend to induce an increased supply, then there must be some method by which this tendency can be offset or held in check. This means a system of compulsion—compulsion which must apply to all farms and all farmers. This illustrates:

Under the original AAA the restriction of wheat acreage was not on a compulsory basis. As a result wheat acreage sown to wheat during the last crop year of the program (1935-1936) was 7 per cent in excess of the average for the 5 years immediately preceding the program (1928-1932). Regardless of the millions spent to reduce the acres sown to wheat, wheat acreage actually increased under the program. This indicates that those not participating in the reduction movement increased their plantings more than the participants reduced theirs. It probably means also, that farmers in noncommercial wheat-growing areas increased acreage more than farmers in commercial areas reduced acreage. In other words, one result of volu-

<sup>1</sup> *Agricultural Statistics*, U. S. Department of Agriculture, 1942, p. 1.

tary control measures is that of shifting production areas. Not only does it shift production from region to region within one commodity field, but it tends to shift production from the controlled commodity to a noncontrolled commodity.

When the government pays farmers to grow less of the so-called "soil-depleting" crops — wheat, corn, cotton, rice, and tobacco — it also pays them to grow in their stead soil-conserving crops — hay and grass. Unfortunately, the better a crop for conserving soil fertility, the better a dairy cow or beef steer likes it. To grow more hay and grass means increased supplies of milk and beef. The tendency was to shift the burden of the depression from growers of favored crops to producers of commodities not within the fold. These are the problems arising out of controls which require further controls for their correction. (Increased soybean production absorbed much of the slack in the corn belt.)

It seems clear that attempts to adjust supplies through acreage control must be based upon wide margins within which to operate. Control of supplies may bring the desired price results in some years, but one can say with certainty that the prospects are not sufficiently dependable.

### *Agriculture Prices Did Not Respond*

One test of the programs as proposed is their effect upon prices. In terms of this test if the programs were effective the prices of basic commodities—the restricted commodities—should occupy, if not a favored position, a position at least as high as the general agricultural price level. This was not the case. The prices of basic commodities were scraping bottom at the outbreak of World War II.

In August 1939, agricultural prices were 74 per cent of parity. They lacked 26 per cent of having the purchasing power of the "parity" base period 1909-1914. But the prices of the basic commodities were much below the price levels of all agricultural commodities.

*Under soil conservation program, production of soil-conserving crops and milk and beef took up the slack.*

*In 1939 the prices of farm products were only 74 per cent of "parity."*



*And the prices of basic commodities which were under control were none above 60 per cent of parity;*

*but prices of some important commodities not under control were from 90 to 100 per cent of parity.*

Prices for						Per Cent of Parity
Corn	.	.	.	.	.	59
Cotton	.	.	.	.	.	56
Hogs	.	.	.	.	.	60
Wheat	.	.	.	.	.	49
Rice	.	.	.	.	.	56

None was more than 60 per cent of parity at the outbreak of the war. By way of contrast,

Prices for						Per Cent of Parity
Veal	.	.	.	.	.	96
Lamb	.	.	.	.	.	94
Wool	.	.	.	.	.	96
Chicken	.	.	.	.	.	94
Beef cattle	.	.	.	.	.	100

None of these latter commodities had been subjected to control limitations. Even granting that the basic commodities which were on an export basis were in greater distress and perhaps the most difficult to handle from a price standpoint, one still is forced to conclude that price lifting by government planning fell far short of the announced goal. One must conclude on the basis of the evidence, therefore, that these programs had little effect upon the total volume of production and did not exert any consistent or significant influence upon price, while at the same time disturbing the process or production.

Up to the outbreak of the war in 1939, acreage restrictions had not prevented burdensome surpluses. Agricultural prices at that time were at the lowest level of the previous 6 years. To be sure, the adjustment programs increased farm income. They distributed large sums of government money to farmers. They increased farm income in the same manner in which every subsidy increases the recipient's income at the expense of the taxpayers as a whole.

*Price lifting by government planning fell short of its announced goal, in spite of enormous expenditures.*

Government expenditures on agricultural activity programs and their administration for the period 1933-1940 are shown in Table 4. The total for the 8 years is well over 5 billion dollars. But if distribution of government funds to farmers is the primary goal, certainly there are ways more simple, less costly as to administration, and

quite as equitable, compared with the method used, which involves a huge full-time staff of government employees, not to mention the 135,000 part-time local county and township committeemen.<sup>1</sup>

### Reasons for Failure of Controls

The controlled economy did not come up to announced expectations. What is the explanation? In what manner and why did the different plans fail to deliver "parity prices" for agriculture?

As has been stated, acreage control is difficult of application unless extended to its logical ends: compulsory supervision of all farms and all farmers, and of the production of most commodities. But acreage control has more fundamental handicaps than merely that of application. Even if acreage adjustments were achieved, volumes produced may be quite other than those anticipated. It has been assumed, evidently, that acreage planted was the dominant factor in controlling supply. Weather, insect pests, and disease exert a greater influence upon production during any one year than is likely to result from any shift in acreage. To the varying forces of nature one should add the ingenuity of the farmer as an uncertain factor in production. Recent bumper corn crops are the result in part, at least, of increased use of hybrid seed as well as widespread adoption of improved cultural practices. Again, increased and more scientific use of fertilizer did much to circumvent acreage reduction.

Baffling surpluses are identified with export commodities—cotton, wheat, corn-hogs, and tobacco. The domestic prices of these commodities are closely associated

*Why the failure?*

*Acreage control is difficult to achieve without compulsion and, even with control, volume is affected by varying natural forces, by farmers' ingenuity, and by improved methods.*

<sup>1</sup> The increase in the number of employees in the Department of Agriculture is indicated by the following totals, as of June 30 in each year:

1929	23,995	1935	37,769
1930	25,736	1936	42,980
1931	28,175	1937	85,143
1932	27,351	1938	102,505
1933	26,540	1939	107,712*
1934	33,298	1940	98,218*

Includes employees hired under special letters of authorization.  
SOURCE: U. S. Civil Service Commission, *Annual Reports*.

TABLE 4. — EXPENDITURES BY THE U.S. DEPARTMENT OF AGRICULTURE IN THE OPERATION AND ADMINISTRATION OF AGRICULTURAL ACTION PROGRAMS, FISCAL YEARS 1933 TO 1940<sup>1</sup>  
(In millions of dollars)

Action programs	1933	1934	1935	1936	1937	1938	1939	1940	Total
Agricultural Conservation and Adjustment Administration:									
Agricultural Conservation Program.....	...	...	...	0.5	369.1	306.6	470.7	581.3	1,728.2
Parity payments.....	...	...	...	...	...	...	25.5	224.4	249.9
Sugar Act.....	...	...	...	...	...	5.9	62.4	48.2	116.5
Federal Crop Insurance Act.....	...	...	...	...	...	...	9.3	8.3	17.6
Soil Erosion Control Program.....	...	...	0.2	3.6	21.4	24.2	22.8	23.1	95.3
Land Utilization Program (Title 3, Farm Tenant Act).....	...	...	...	...	...	0.5	3.6	8.6	12.7
Agricultural Adjustment Act, May 12, 1933, and related acts.....	...	300.4	629.6	497.8	81.7	3.6	2.1	1.9	1,517.1
Cotton Price Adjustment payments.....	...	...	...	29.0	13.4	0.2	122.9	0.5	166.0
Retirement of cotton-pool participation trust certificates.....	...	...	...	...	...	...	1.2	0.2	1.4
Refunds of processing taxes and administration expenses.....	...	...	...	...	9.6	3.4	3.6	0.1	16.7
Farm Security Administration:									
Loans, grants, rural rehabilitation, appropriated funds.....	...	...	...	...	...	...	0.2	0.4	0.6
Farm tenancy loans and administration, appropriated funds.....	...	...	...	...	...	3.2	20.9	30.4	54.5
Liquidation and management of resettlement projects.....	...	...	...	...	...	...	1.6	1.9	3.5
Agricultural Marketing Administration:									
Exportation and domestic consumption of agricultural commodities.....	...	...	...	3.2	19.0	34.9	85.2	143.3	285.6
Marketing service.....	4.9	3.9	4.4	4.7	4.9	5.4	5.8	6.0	40.0
Rural Electrification Adm., administrative expenses and loans:									
Appropriated funds.....	...	...	...	...	0.9	10.6	37.6	37.5	86.6
Cooperative Farm Forestry.....	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	1.0
Commodity Credit Corporation:									
Subscriptions to capital stock.....	...	...	...	97.0	...	94.3	...	...	97.0
Restoration of capital impairment.....	...	...	...	...	...	...	...	119.6	213.9
Farm Credit Administration:									
Loan activities, regular funds.....	33.9	22.3	13.5	11.5	26.7	8.0	3.2	4.3	123.4
Payments to Fed. Land Banks and Fed. Farm Mortgage Corp.....	...	7.0	12.5	29.1	32.8	37.8	38.5	35.8	193.5
Removal of surplus cattle and dairy products.....	...	3.1	85.0	25.4	2.8	...	...	...	116.3
Elimination of diseased cattle.....	...	...	...	1.0	17.7	14.1	2.7	...	35.5
Flood control (transfer from War Dept.).....	...	...	...	...	...	0.3	1.4	2.3	4.0
Total.....	39.0	336.8	745.3	702.9	600.1	553.1	921.3	1,278.3	5,176.8

<sup>1</sup> Hearings before the Subcommittee of the Committee on Appropriations, House of Representatives, 78th Congress, 1944. (This table does not include loans by the Reconstruction Finance Corporation for agricultural purposes. Between 1934 and 1938 the expenditures of the Farm Security Administration, including subsistence homesteads and resettlement projects were (in millions of dollars): 1934, 2.4; 1935, 5.4; 1936, 138.0; 1937, 209.7; 1938, 180.1.)



with world prices. Fluctuations in domestic production do not notably affect world supplies and hence are not likely to influence greatly world prices. The curtailment of the domestic production of cotton, for instance, was offset by increased foreign production. Only through isolation from the world market can a production-restriction program boost the domestic prices of those commodities—a procedure involving costs which may easily exceed benefits.<sup>1</sup>

Production control is based upon the assumption that small crops have a larger total value than do large crops. Statistical evidence does not support this view. Variations in demand cause some large crops to have high values and some small crops to have low values. In 1916 this country produced 2.4 billion bushels of corn which sold for an average price of \$1.16 per bushel. In 1933 we raised approximately the same amount, which sold at an average price of less than half that of 1916 — 52 cents per bushel. The supply for the two years was approximately the same. A change in the demand situation resulted in corn selling one year at over twice the price of the other year. In other words, production-control programs do not touch the demand side of the farmers' price problem.

When a manufacturer reduces production, he generally reduces his heaviest item of expense—labor costs. But when a farmer reduces production, he eliminates but little of his expense. With him taxes and interest are heavy cash expense items. But those continue at the same level, whether or not he cultivates all or only a part of his acres. His equipment upkeep is much the same, whether he operates at full or half capacity. Cutting down on farm labor, for most farmers, merely means that he and members of his family work less. Farmers can gain little by throwing themselves out of work. Even though reduced volumes sold at higher unit prices, it does not necessarily follow that incomes to farmers would increase in proportion. Less to sell at a higher price may not yield so large a net financial

*World supply also may counteract restriction of domestic supply.*

*Varying demand may affect farm prices regardless of volume.*

*Farmers, with heavy fixed costs, must depend on operation at full capacity, whether prices are high or low.*

<sup>1</sup> An admission that production control on a national basis is not sufficient to insure satisfactory price increases is reflected in the international wheat agreement signed by the government of the United States in 1942. This agreement is designed to limit production, regulate surpluses, and fix prices on an international scale.

result as more to sell at a lower price. Unit farm costs have a marked tendency to decrease as volumes increase. Fixed farm costs are heavy. One of the many shortcomings of the parity-price concept is that price is only one of the ingredients in farm income. Volume produced plays a mighty important role in determining the farmers' financial welfare.

Farm prices are likewise seriously affected by barriers to international commerce and by increased prices of non-agricultural products resulting from efforts of organizing labor.

*Farm production as a whole is not responsive to changes in price levels.*

As pointed out above, farmers must be interested in price because it is the principal variable affecting their income. It is true that the production of individual commodities may shift considerably with changes in relative prices but, nevertheless, agricultural production *as a whole* is not responsive to changes in price levels.

It is likewise true that farmers, being producers of raw materials, are as a whole subject to greater price fluctuations than manufacturers as a whole.

*Subsidies may afford temporary relief, but seldom solve a problem. They act as an opiate, beget other subsidies, and invite pressure groups.*

*Subsidies do not supply the answers.* Agricultural controls are based largely upon subsidy awards. One can hardly criticize farmers for accepting subsidies. But one may well question the statesmanship of a government that controls by subsidies. Subsidies may lessen the pain, but they seldom furnish the cure. In only rare instances do they eliminate the cause of the distress or lead toward cure. Subsidies are likely to act as an opiate that becomes more serious than the disease itself.

One subsidy begets another. They feed upon themselves. There seems to be no convenient halting place short of an empty treasury. A favor granted to one class of interests is likely to be a handicap to another class of interests. For National welfare, it seems, would be better served by fewer subsidies than by their multiplication.

When the government has favors to dispense, be they pensions, bonuses, preferred bargaining status, or agricultural benefits, such favors invite the formation of pressure groups with a view to gaining as great an advantage as possible. The more decisions a government is permitted to

make, the greater the incentive for groups to organize in order to press their claims the more effectively. Recent experiences have brought to light another hazard. Bureaus once established for the administration of government generousities are not easily abolished. They become an end in themselves.

*Cost of price control.* From the standpoint of national welfare, one may seriously question the fruitfulness of a controlled economy based upon restriction of production—whether it be on the part of labor, industry, or agriculture. Certainly as a people we shall be unable to advance upon a philosophy of more and more for less and less.

Effective government participation in price-boosting in the agricultural field requires more intervention than has yet been exercised during peacetime. Operation along these lines requires a change from a legislative type of government with limited authority to an administrative type of government not hampered by checks and balances. Such expansion of government authority can be made only at the expense of private initiative. Instead of telling business, industry, and agriculture the things they may not do, the government will tell them what they shall do.

Experience under the Agricultural Adjustment Act leads one to believe that price fixing is the logical destination of price-boosting controls. The whole trend in agricultural price planning has been to remedy the weakness of control measures by more control measures, and the substitution of compulsory controls for voluntary control programs. The costs in terms of individual initiative, free markets, and free exchange are heavy. It is not at all clear that farmers are willing to pay the price, and even if they are willing there is ample basis for questioning whether this line of action provides the correct answer to their problem.

There is likewise a danger that price supports will be paid into land values and thus create artificial land prices—perhaps even tending to contribute to a farm land boom, which, if like that of 1917-1920, would be disastrous.

*Bureaus which dispense subsidies are not easily reduced or abolished.*

*A controlled economy based upon restriction of production, whether in agriculture or in industry, does not make progress.*

*Operation of controls requires change from limited legislative government to administrative government without checks and balances.*

*The costs in loss of individual initiative and free exchange are heavy, and results do not justify costs.*

*Price supports also create artificial land prices.*



## AGRICULTURE AFTER WORLD WAR II

*The defense program started the wartime rise of farm prices. Now there is fear of a post-war decline.*

*This discussion of postwar self-support for agriculture assumes that our economy will not be dominated by international decisions beyond our control and that the war-time demand for farm products will continue for some time in post-war period.*

*We look ahead, therefore, to the long pull beyond.*

Farm prices have been going up since the beginning of the defense program. These increases are not unlike those accompanying World War I. Many farmers are apprehensive as to what is likely to happen to farm prices now that the war is over, even though price guarantees at 90 per cent of parity have been given for the immediate postwar period. Will American agriculture again be faced with huge supplies selling far below levels that will support an acceptable scale of living? What must be done to maintain a self-supporting agriculture during peacetime?

We will attempt to answer that question at least in part. This discussion makes no assumption of completeness. It is based upon no unusual powers of foresight into the future. The answers are projected upon the belief that the future is not obscure in all respects, that economic history tends to repeat itself under similar circumstances and that it is worth while to attempt to anticipate coming events in order to avoid some of the undesirable prospective developments. This analysis is based upon two fundamental assumptions regarding future developments:

- (1) that the Allied Nations will be in position to shape international forces in a manner acceptable to them to the end that our domestic economy will largely follow lines of our own choosing, and that our actions will not be dominated by unfavorable international decisions beyond our control—in other words, that the manner of handling our postwar problems shall be the result of our own thinking;
- (2) that the immediate postwar period will be a continuation of the war period as regards the demand for agricultural products both at home and abroad.

Hence this discussion deals with the period following the immediate postwar adjustment era. It pertains to that period when the war-denied desires of consumers for goods and services have been met with adequate supplies. It has to do with the long pull that lies ahead of agriculture.

when the demand for its products is no longer dominated by war and the world-wide relief aftermath.

We have already considered the extent to which postwar agricultural prosperity is related to urban prosperity.

But the "emergency adjustment" of the next few years will doubtless cause agitation for utilization of "relief" measures similar to those considered during the thirties.

### *The Lesson of Prewar Experience*

We know that the recent government policies in regard to agriculture have been presented as "aid to the farmer." It is true that farmers have obtained large sums of money from the government treasury. Since this money was not in the treasury but took the form of a deficit and an increase in public debt, the farmer obtained special government aid at the expense of the national economy as a whole. Furthermore, the farmer owes his proportionate share of the national debt and service charges on that debt.

Agricultural policies in the aggregate were unsuccessful for four major reasons:

1. American agriculture was feeling the full effect of the world-wide depression. Neither action by farmers themselves nor action by the government could have solved our agricultural problem as long as general economic depression prevailed.

2. The combination of government hostility to business with deficit financing, labor favoritism, and so forth, had a depressing effect on the economy as a whole, and agriculture can be permanently prosperous only when the entire country is prosperous.

3. Efforts were made to ignore or challenge the arbitrament of market prices, as far as agricultural products were concerned. Government attempted to obtain for farmers more than the market affirmed that agricultural products were worth, or else adopted mechanisms for making up the difference between prices which the market could afford and those which politicians decided the farm-

*The lesson of failure of prewar measures includes four major points:*

*1. A world-wide depression, as long as it continued, prevented effective action by farmers or government.*

*2. A combination of government hostility*

*to business with deficit financing, labor troubles, etc., had a depressing effect on the economy as a whole.*

**3. The arbitrament of the market was challenged or ignored, with weakening of self-dependence and development of demoralizing tensions.**

**4. Government price fixing restricted domestic consumption and lost foreign markets.**

ers should receive. Two unfavorable results followed from this mistaken policy: (a) Farmers were induced to produce more than the market could absorb at remunerative prices in the belief that political pressure could force the government to establish minimum prices and purchase the so-called "surplus." Of course this procedure threw agriculture out of balance with other segments of the economy to the disadvantage of all. (b) Farmers were taught to look to the government instead of to themselves for decisions on what and how much to plant, when and at what price to sell, and perhaps how to vote. Since no government official can have intimate knowledge of all local conditions and since the entire philosophy of political and economic freedom is based on the duty of the citizen to arrive at his own conclusions and govern his own life, it is not surprising that broad extension of government tutelage in the field of agriculture was, on balance, a detriment to the farmers, threw the national economy into stress and tension which were unfavorable to the farmers, and increased the national debt, which the farmer must eventually help to pay.

4. Government action in fixing prices of agricultural commodities above those which a free market would afford also resulted in restriction of domestic consumption, and particularly in loss of important foreign markets for agricultural products. Some of those markets will probably never be regained.

The failure of the government price-boosting program is thus described by the U.S. Department of Agriculture in an April 1945 publication, "A Conversion Program for the Cotton South," p. 53:

Efforts to maintain the position of cotton artificially are, in the long run, certainly doomed to failure. Price maintenance means loss of the export trade and reduction of home markets, as well as the eventual choice between drastic acreage control and the piling up of an unmanageable surplus. Export subsidies invite retaliation. Support of cotton through income payments to growers means increasing dependence of Southern farmers on large year-to-year federal appropriations. Neither course would cure the situation—both would tend to perpetuate the conditions that made federal aid necessary.



Twenty-three authorities in various economic fields recently contributed essays to a book, *Food for the World*, published (1945) by the University of Chicago Press. They indicated a substantial agreement as follows:

The agricultural price policy recently pursued by the United States has protected high-cost farmers, raised prices to consumers, postponed the shifting of agricultural resources from products in chronic surplus to foods needed to raise the nutritional status of the population, and curtailed the flow of American farm products to foreign markets. [Quotation from summary by Helen C. Farnsworth of the Food Research Institute in *The Scientific Monthly*, October 1945, p. 323.]

To summarize: Government refused to permit agriculture to adjust itself to the conditions which prevailed in the American economy. Artificialities in prices, in the amount of production, and in the kinds of products were introduced. Agricultural products were stored rather than sold, with the "carry-over" in storage tending to act as a market threat which lowered prices in subsequent years. Obvious failures of the program caused such vacillation and arbitrary action that neither agriculture nor other parts of the economy could restore themselves to health. To repeat, agriculture's best hope is in a prosperous national economy, not in obtaining special favors from government.

Farmers felt that they had a valid excuse for seeking various kinds of subsidies from government. They were correct in their contention that certain industries had been beneficiaries of protective tariffs, and they believed that such tariffs had increased the cost of products which farmers buy. But, instead of attempting to obtain equal or greater favors for themselves, farmers would have been better advised to attack the entire system of governmental subsidies. In efforts which they might make to abolish all varieties of handouts by government to citizens, farmers would obtain a large measure of support from the business community.

Farmers are correct, too, in maintaining that they must have time in which to adjust themselves to a self-supporting basis and that during this time they properly

*Government refused to permit agriculture to adjust itself to prevailing conditions. Failure of the program retarded recovery.*

*Instead of seeking special favors, farmers would better have attacked special favors granted others and could have got business support in that effort.*

*They may now, however, rightly ask continued aid while they adjust themselves to a self-supporting basis.*

may expect help from government. In this respect the situation is roughly comparable to that of industries which enjoy a large degree of tariff protection. Obviously, if such tariffs were suddenly to be substantially lowered or removed, such industries would suffer heavily. So it is with farming. In both instances the government aid has been more or less "capitalized" and, if severe damage to our economy is to be avoided, time must be allowed for the "decapitalization" of these government benefits.

### *No Need for Pessimism*

*A fatalistic or pessimistic attitude toward farm problems is not justified.*

Although it is clear that recent governmental policies have injured both farmers and other classes of citizens, it does not follow that a fatalistic or pessimistic attitude toward agricultural problems is justified.

*Mechanization and other improvements in agriculture resulted in excess of supply over demand.*

A major share of those problems derives from the enormous changes that agricultural technology has undergone in recent decades. Mechanization of farms and the introduction of improved varieties of plants and animals have meant that fewer farmers and fewer acres were required to supply the ordinary requirements of our population for food and clothing. Since demand for many classes of agricultural products has little elasticity, even moderate increases in supply of such products resulted in drastic reductions in prices. Expansion of sales, coincident with price reduction, simply failed to take place, and widespread distress among farmers was an ugly fact.

*Other changes also, as in marketing organization, disrupted simpler methods of production and marketing.*

Furthermore, mechanization of farms and continued urbanization led to profound changes in the structure of agricultural organization. Instead of producing its own sources of power on the farm, American agriculture had to grow and sell cash crops so as to buy gasoline. Barter of farm products for manufactured goods at the local store almost ceased, and great marketing organizations were developed. Produce exchanges and contracts for future sales supplanted simpler methods of disposing of farm crops. All these new devices represented increased efficiency, but they came in such far-reaching extent and with such bewildering rapidity that agriculture was

*Necessary adjustments involved great strain and loss.*

*The maladjustments can*

able to make the necessary adjustments without enormous strain and loss.

There is no complete cure for technological maladjustments except the passage of time. This cure may be painful, but it is effective. Already there are evidences that American agriculture has overcome the worst phases of technological shock. Mechanical power has gone far in replacing livestock. Because of its great significance we will review a few examples of the use and effectiveness of the technological change in farming.

### *How Farming Benefits from Technological Progress*

Sherman E. Johnson, head of the Farm Management and Costs Division of the Bureau of Agricultural Economics, testified before the Tolan Congressional Committee (*Department of Agriculture Bulletin*, Feb. 13, 1942) that

... certain [farm] machines are not only definitely of a labor-saving character but they also facilitate performing the farm operations in proper season, and may therefore increase both the quantity and the quality of the output.

The importance of this in the wartime need for increased agricultural output and the wartime shortage of farm labor was seen in the fact that each new tractor (not replacements)

... will save approximately 450 hours of man labor annually if used in operations to which it is adapted, and if fitted with complementary equipment. Each combine cutting 220 acres of grain will save 1,000 hours of labor annually compared with binder and stationary thresher harvesting. A new corn picker will save about 420 hours on 140 acres of corn compared with hand-picking, and a new milking machine used on a herd of 18 cows will save about 450 hours of hand-milking. It is evident that machinery is a very important substitute for labor on many farms.

And note this tribute to ingenuity:

The recent trend in manufacture of machinery and equipment has been towards making more adaptable machines, and it would be

*be removed only gradually, but the worst phases seem to have passed.*

*Experts emphasize the value to agriculture of technical improvements and the rapid adoption of them.*



difficult to suggest any use that has not already been discovered by ingenious farmers and adopted by enterprising manufacturers. Of great importance in the present production job are the recently developed midget combines, small tractors, general-purpose tractors, and the wide variety of adapted equipment manufactured especially for tractor use.

The increased value received by the farmer is thus stated by Mr. Johnson:

The American farmer of today has a larger power unit, his implements and machines are larger, and the rate of travel is greater than was the case 20 years ago. Equipment has steadily increased the efficiency of labor.

Farm electrification—making both for more efficiency and better living—has also been expanding rapidly. There were 175,000 electrified farms in 1932, 800,000 in 1938, and 2,240,000 at the end of 1942.

During the war, because of expanded demand and curtailed labor supply, farm mechanization was greatly extended.

*The war speeded up mechanization, other aids to efficiency, and organization of marketing.*

What has happened in wartime is a speed-up of a long-range agricultural mechanization. The story of what that has meant for farming is shown by the fact that in Colonial times 90 of every 100 people in this country had to work on farms to grow enough food. Now the ratio is just reversed. A century ago one man could take care of about five acres of corn; now he can handle a hundred acres. In 1909, it required 12.7 man-hours to grow an acre of wheat; by 1942 this had been halved and today it's down to 3.3 man-hours. . . .

Greater mechanization will make farmers more independent of weather and of seasonal labor. Machines make quicker planting and harvesting possible. They do away with the need for extra hands at harvest time. This "tooling" should also help boost farmers' incomes by cutting costs and paving the way for new crops that couldn't be raised economically with hand labor. [John A. McWethy, in *The Wall Street Journal*, Apr. 24, 1945.]

In 1945 farmers in the United States had 33 per cent more tractors, 75 per cent more grain combines, 50 per cent more corn pickers, and 60 per cent more windrow pick-up hay balers than before the war (Harold Fleming in *Christian Science Monitor*, Sept. 17, 1945).

In addition to mechanization as a means to increasing farm efficiency the use of hybrid corn, airplane du-

ing, new insect killers, fertilizers, crop rotation, and soil conservation has spread to such a degree that they are not likely to cause as great disruption as in the past. Organized marketing is getting established but still has far to go.

Besides these developments whose beneficial effects will appear with the lapse of time, other ways can be taken to improve the status of American agriculture. Of great promise is farm chemurgy. Without attempting to present more than typical examples, attention may be directed to industrial alcohol from farm products, to cellulose from farm sources, and to such products as tung oil, ramie, and soybeans, all of which have wide use in industry. In short, farmers should search for products in which demand expands in equal or greater proportion as efficiency brings about reduction in price.

It is, of course, obvious that farmers will not benefit from industrial use of farm products to make articles, if raw materials which compete with agricultural raw materials can be supplied at a cheaper price. Moreover, efficiency of production utilizing agricultural raw materials must be as great as that of competitive production with nonagricultural raw materials, permitting sales at competitive prices, if farm chemurgy is to be of very great benefit to farmers.

### *What Government Can Properly Do*

Government in peacetime can make its best contribution to agriculture by furnishing ample and accurate information to farmers and by conducting research work which farmers are unable to perform for themselves. But government should not concern itself with price, or with the quantity or kind of products which farmers produce. Government cannot possibly control the price interrelationships of all the commodities in our economy, except for short periods, and the aftermath of price control is more costly than prompt adjustment to the dictates of the market. But if the government destroys free competition in economic segments other than agriculture, it may then be necessary to concern itself with the price, quantity, and kind of products which farmers produce.

***Chemurgy is expanding farm markets.***

***Government can make its best contribution by conducting research and furnishing information.***

***But it should not attempt to control prices or production, or destroy free competition in any segment of our economy.***

*It should withdraw also from the field of credit.*

*And it will aid farmers by measures of economy. Taxes are a greater burden to farmers than interest.*

*Farm cooperatives are forms of private enterprise in which farmers have found some advantages.*

Another field from which government should withdraw is that of credit (both agricultural and nonagricultural). Easy money has been a bane, not a blessing, to farmers. When conditions in agriculture are not such as to entitle borrowers to loans at going interest rates, then most certainly agricultural commodities have been produced in excess and prices are unattractive. Since the extension of credit tends to increase production, government agencies providing credit only aggravate the fundamental problem when such credit is not available at going interest rates.

Taxes constitute a much greater burden on American farmers than do interest charges (7.7 per cent of total farm expenses in 1935-1939 compared with 6 per cent in 1925-1929). Hence government is in position to aid farmers by introducing measures of economy. There has been some evidence of opinion among farmers that government largess for themselves could be obtained at the expense of the rest of the population. This is not true. As owners of physical assets of enormous value and as recipients of substantial income, farmers cannot avoid their proportional burden in carrying the service of the national debt and paying for any government extravagance which exists.

### *Farm Cooperatives*

Under specific circumstances, farmers have found a real advantage in organizing cooperative credit institutions, cooperative marketing organizations, and cooperative purchasing agencies.

A "cooperative" is, in essence, simply an effort of a group of individuals to combine for the purpose of establishing a business, to produce or buy or sell a commodity or service. City consumers have formed groups to buy goods and sell them. Businessmen and others have organized mutual fire-insurance companies; most life insurance is purchased through mutual companies. Farmers join together to buy goods they use in production or to sell things they grow. People who save money may put their funds in a mutual savings bank. All these are types of cooperative enterprise. They are forms of private enterprise.



The general principle should be recognized that, if a cooperative enterprise, or any other legitimate form of enterprise, can make a place for itself in the United States by its efficiency, it should not be handicapped by government. On the other hand, no form of business enterprise should be given special advantages which put its competitors in an inferior position before the law or require such competitors to assume an unfair share of the burden of supporting governmental costs. The real problem is to see to it that regulations and laws which affect business operators apply equally to all forms of business, whether sole proprietorship, partnership, or corporation, and whether a corporation is formed on a stock or cooperative basis. This applies to the business activities of cooperatives, particularly in matters of taxes, loans, management and education services, antitrust laws, and use as "chosen instruments."

*Government should neither discourage them nor offer them special advantages.*

### Soil Conservation

Another aspect of agriculture, in which government may take a proper part, is soil conservation, viewed not merely from the farmers' standpoint but in the interest of consumers generally. Urban dwellers are basically dependent on the maintenance of good soil for an adequate supply of food and fiber, because even good farmers and good methods cannot provide an adequate supply without good soil. Scientific investigation by the Department of Agriculture, together with the activities and publications of state agricultural colleges, farm economists, and agricultural publishers, has done much to improve planting and cropping methods and other improvements in soil use. More and better fertilizers have greatly increased productivity.

According to the Soil Conservation Service of the Department of Agriculture (*New York Times*, Sept. 12, 1945), 230 million acres of soil have been ruined in the United States in the past century by poor cultivation or erosion, but there are now 460 million acres of good farm land, sufficient to feed and clothe the nation's population at the estimated rate of growth if the soil is conserved.

*Government may properly take a part in soil conservation, which is in the interest not only of farmers but also of the public generally.*

*We still have 460 million acres of good farm land, but experts emphasize the danger of soil erosion and depletion.*

There are many, however, who express fear that insufficient attention is given to soil erosion and exhaustion of soil fertility and who believe that the intensive land use during the war has increased the danger of soil depletion. They state that the United States cannot look abroad for food supplies because "there is no longer an abundance of good productive land to feed and clothe the peoples of the world; in fact, there is not a single acre to waste." So said Hugh H. Bennett, chief of the Soil Conservation Service, as quoted in the *New York Times*, Sept. 12, 1945. And L. J. Norton, professor of agriculture at the University of Illinois, testified before the Postwar Committee of the House of Representatives (p. 1373 of 1945 Agricultural Hearings) that "the whole nation is interested in maintaining our basic agricultural plant in a sound condition."

*No big new program is needed, but the present soil-conservation program, with its 1,400 organized districts and local leadership in each district, should be developed more adequately.*

It is proper to have the government, in the vital interest of future generations of consumers, support soil conservation on an adequate basis. This does not mean, however, that we need some big new program for this purpose, or payments to farmers to produce one crop or not to produce another. Already the Soil Conservation Service has 1,400 soil-conservation districts, covering a total of 763 million acres. In these districts farmers have assumed a primary share of responsibility for using such individual and group methods as contouring, cover crops, care of gullies, stream direction, and reforestation at the headwaters of streams.

In continuance and possible extension of this work, local people should be used as far as possible "in actually developing the conservation program for different areas. . . . The formulas ought to be worked out in such a way as to make the greatest use of local knowledge in developing the specific conservation practices put into effect" (Norton, *ibid.*). The Postwar Agricultural Policy Committee of the Association of Land Grant Colleges, in its report of October 1944 (pp. 39, 40), says that "since the direct remedies hinge on better land use and soil management practices, a very high proportion of the needed action must come from farmers on their own soil. . . . Responsible leadership must be assumed by farmers in developing

the soil conservation district program, on both local and state levels."

As a part of this whole soil-conservation program in the interest of consumers, attention should be directed to the continuing demand for timber and wood products. A million or more farms are said to need to have their woodlands improved, not only to benefit consumers but also to add importantly to farm income. There should be more and better extension work in farm woodland management. (See, for example, testimony by Prof. John Black of Harvard before the House Postwar Committee, 1945 hearings, p. 1498.)

### *Farmers' Responsibility in a Democracy*

Finally, farmers constitute the largest single economic group in our population, and they probably have political importance even greater than is represented by their number in relation to the rest of the population. Therefore, farmers not only have a definite interest in reestablishment of the free price system and the termination of raids on the public treasury by pressure groups, but they have both the responsibility and the power to enforce these essential reforms in present governmental practices. Economic freedom is as essential to agriculture as to industry. American farmers prospered under this system. Their own experience and the history of agriculture as well as industry when dominated by government afford the strongest reasons for reestablishing the traditional independence and resourcefulness of the American farmer.

*A million or more farms are said to need improvement of their woodlands. More and better extension work is called for.*

*As the largest single economic group in our population, with the greatest political power, farmers have influence adequate to reestablish the free-price system and end raids by pressure groups. They want economic freedom.*





## VII

# SAVING AND CAPITAL FORMATION IN THE ENTERPRISE SYSTEM

EVERYONE is aware that it has been primarily through the effective use of tools and machines that the people of the world have been able to increase production and thereby improve their scale of living. Everyone recognizes that without this material progress our cultural and political progress would not have been possible. And everyone realizes that the nations which are culturally and politically backward, and in most cases also spiritually backward, are those countries in which for some reason there has not been such a great development in the use of tools and machines. In other words, everyone knows that the goals for which we constantly work—material, cultural, political, and spiritual improvement—are directly related to, and in large measure dependent upon, increased productivity. And everyone knows that this increased productivity has resulted from man's having supplemented his own strength and effort with tools and machines—from his having been able to make "capital goods" work for him.

But while all of us are aware of these elementary truths, it is far from clear to many of us just how we get these tools and machines. We just take it for granted that someone invents them, that they are then manufactured, and that the person who needs the tools and machines simply buys them.

From a purely individual point of view this conception of how capital goods are created is correct. Someone invents a machine for wrapping bread, either he or someone else starts to produce it, and bakeries buy it and install it in their factories. But a moment's thought will make it clear that there is far more than this to the process of

*The goals we work for—material, cultural, political, spiritual—are related to and largely dependent on productivity.*

*And productivity has increased by accumulating and using "capital goods" to aid our work.*

*Capital formation is stimulated by invention, but that can go on only with somebody's savings,*

*even in a simple economy.*

*So also the individual manufacturer requires capital for producing a machine.*

*In a highly developed economic system, capital formation is a far more complex process.*

capital formation. How is the inventor enabled to make this new machine? We do not mean how is he able to get the idea into workable order, but how is he able to get the time and materials necessary to make his model? He cannot do without eating while he is working on the invention. Neither can he just pull the material he needs out of the thin air. Obviously there must be a "stockpile" upon which he can draw. This means that at some point in our economic activity there has been a surplus over the immediate needs of those producing it—that someone has "saved" and thereby created that stock pile.

The problem as it affects the manufacturer of the new invention is even more complicated. He has to be prepared to buy the raw materials out of which the new machine will be made, to pay the wages of the workers involved, and to get the machine tools and other equipment to carry on production. All of this requires "capital." Where does this capital come from? It tells us nothing to say that the producer either has it himself or else borrows it. That begs the real question. If the producer has the capital, where and how did he get it? If he borrows the capital, where and how did the lenders get it? And why do they have just the amount they have, rather than twice or only half as much?

In terms of the individual inventor or the individual producer it is comparatively easy to think through the problems and arrive at a reasonably correct and complete answer. But a highly developed economic system, such as we find in all the great industrial nations of the world, is something more than the mere summation of a group of individuals. It is an almost incredibly complex, delicately balanced productive organization, which must be thought of as a unit. Attempting to analyze it in terms of the individual is comparable to describing a watch in terms of each little part without reference to how they fit together. It is not sufficient, then, to discuss capital formation only as it affects the individual inventor or producer. We must think of it, if we are to have a real understanding of the process, primarily in terms of society as a whole.

It is the purpose of the following discussion to a



alyze the problem of saving and capital formation, or saving and investing, from this broad point of view.

First, we take up the question of the character of savings and capital—what the terms mean. This is a rather lengthy discussion because many present-day popular pronouncements reflect a basic confusion as to these terms and it is essential that their exact meaning be understood if one is to have a sound basis for appraising the problem of saving and capital formation.

Following this is an analysis of the character of investment and hoarding. The purpose of this section is to reveal the effects upon the economy of these two means of "using" surplus funds.

Next comes an examination of the widely discussed thesis that for some years there has been "oversaving" in this country and that, since this condition is certain to persist, it will be necessary henceforth for the government either to borrow or to tax away this "excess" if we are to have full employment. We attempt to show the fallacy of this line of thought.

Following this, and concluding what may be termed the "theoretical" part of our analysis, is a discussion of the relation of bank credit to capital formation. Specifically, we try to answer the question whether banks can "create" capital. Our answer is in the negative.

As a final section we give a relatively brief description of the practical methods by which savings actually are converted into capital. Various statistics on the record of such capital formation are given in an appendix.

## I. THE CHARACTER OF SAVINGS

To the man in the street, "savings" means the amount he has put aside out of past earnings, or the difference between his income and outgo, or what he has left at the end of a specified period after he has paid all his bills. To the economist, "savings" may mean this, which is savings from the individual point of view; or it may mean something which is entirely different, namely, savings from the social point of view. And if the two are not kept clearly

*We consider in order (1) the character of savings and capital, (2) the character of investment and hoarding, (3) the "oversaving" theory, (4) the relation of bank credit to capital formation, and (5) the conversion of savings into capital.*

*Savings from the individual viewpoint and from the social viewpoint should be clearly distinguished.*

*Otherwise one reaches a false total by adding individual savings to find savings of society.*

distinct at all times conclusions are almost certain to be drawn which are wholly false.

For example, by taking the individual concept of savings and applying it to society as a whole, we get such a fallacious notion as that an increase in the volume of bank deposits, or bonds, or other money instruments reflects an increase of savings for the country as a whole. Superficially this appears correct because beyond question most saving by individuals is, at least in the first instance, in the form of such money instruments. It is actually such a conclusion, as we will show, is quite unwarranted. There must be some way, therefore, by which we can reconcile the individual and social concepts—some method by which one can add up individual savings and thereby get a total which is not inconsistent with an overall social concept. In other words, there must be some

<sup>1</sup> An outstanding example of confusion in the difference between individual and social savings—or more accurately, in the character of saving itself—is the calculation made by the Securities and Exchange Commission. This organization arrives at a total “savings” figure for the nation as a whole by considering changes in the following items:

- Currency and bank deposits
- Savings and loan association deposits
- Insurance and pension reserves
  - (a) Private insurance
  - (b) Government insurance
  - (c) Total
- Securities
  - (a) Federal
  - (b) Municipal
  - (c) Corporate and other
  - (d) Total
- Nonfarm dwellings
  - (a) Purchases
  - (b) Changes in debt
  - (c) Savings (a minus b)
- Automobiles and other durable consumers' goods
- Liquidation of debt, not elsewhere classified

It is obvious that these items are of at least three types: actual physical goods, such as nonfarm dwellings and automobiles; items representing physical assets such as corporate securities; and items representing promises to pay, such as financial securities, which may have no connection with physical assets. A correct savings figure built up of such items should include also the negative side of the picture—showing financial obligations against financial assets, and loss of value of physical assets against increase of value.

If between two dates deposits go up, the increase appears as “savings,” although it may have been simply the result of the banks' having made more

basic meaning which can be assigned to the term "savings." And, if we are to understand the relation of saving to capital formation or the relation of savings to the general welfare and progress of the nation, we must think in terms of this basic meaning.

### *The Dilemma in Measuring Savings*

Let us begin by considering what constitutes savings from the point of view of *society as a whole*. What do we need to include and what must we exclude in order to get an accurate total? Obviously we must include our factories, our machines, our stocks of materials and durable goods, our railroads, our homes, etc. But what of the shares of stock we own in our corporations, or the bonds we hold, or our savings bank deposits? They represent savings to the individual to whom they belong. Do they also represent savings for society as a whole? Well, clearly we cannot add into our total both the factory and machines owned by a corporation and the stocks and bonds of the corporation which are outstanding. That would be counting the same things twice. Likewise we cannot include both our savings bank deposit and the railroad or building in which the savings bank invests the funds we deposit with it. And so on throughout the whole list of items that one may compile. In other words, in considering savings for society as a whole one must make a sharp distinction between actual usable goods and money<sup>1</sup> or credit instruments (bonds, bills of exchange, etc.) which are based upon those goods. Realization of that fact is the first essential step in the development of a workable and meaningful concept of savings.

The second step is more difficult. It consists of determining whether it is better to measure savings in terms of goods, or in terms of money and the credit instruments based on these goods, or, as frequently is stated, both types of measurement are economically valid and useful

*Individual claims on wealth do not constitute savings for society as a whole, and the property on which they are based should be counted only once.*

<sup>1</sup>Throughout this discussion we use the term "money" to include only credit money." That is, we exclude gold, or what ordinarily is designated as full-bodied money." The reason for this, aside from greater simplicity, is that gold is in circulation as money in this or any other of the principal nations today, and none has been for many years.



*Nor does an increase in money and other credit instruments necessarily mean an increase in individual savings, since goods which are savings may have been exchanged for them, and vice versa.*

*And the offsetting in such exchanges does not justify including credit instruments in computing total savings of society,*

concepts, and the one which is better depends solely upon the purpose for which it is to be used. Let us attempt to arrive at a definitive conclusion on this question. We may well begin by looking at the concept of savings in terms of money and other credit instruments with a view to determining just what, if anything, it means in practice.

Is there really such a thing as a concept of savings in terms of money and credit instruments alone which can be applied to an individual? Actually there is not. One can measure his money savings, if he likes—the amount by which in a given period his holding of money and credit instruments increases; but this has no necessary relation to the change in his total economic position during the period. The increase of these items may result solely from his selling some of his property—his car, house, or even personal belongings, such as jewelry. Likewise a decrease in his holding of money and credit instruments may reflect nothing more than a conversion of such items into a house, or new farm machinery, or some other form of property. One cannot escape the conclusion, therefore, that for an individual the measurement of savings by changes in his holding of money and credit instruments may be seriously inadequate as a means of showing change in his economic position. We use money terms necessarily to express the amount of his savings—use them as a common denominator in order to add various forms of wealth together—but that is fundamentally different from assuming that by merely adding up an individual's money and credit instruments we get a figure which represents his savings.

Is the concept of savings in terms of money and credit instruments equally unsatisfactory when applied to society as a whole? If John Jones sells his house or watch and thereby increases his holding of money instruments, is it not true that Sam Smith who buys the house or watch thereby reduces his holding of money or credit instruments by an equal amount? In other words, when such transactions destroy the validity of the concept of savings in terms of money and credit instruments for an individual, is it not true that they cancel out as between buyers and sellers, so that if we take only total figures

for society as a whole we get an accurate measure of savings? Those who defend the concept of savings in terms of money and credit instruments have to assume that this is true. Let us see if this assumption will stand analysis.

Suppose that John Jones sells his home to Sam Smith for \$10,000. What are the various ways by which Smith may pay for it? There are two. First, he may transfer to Jones physical property, such as another house, or machinery, or the like, having a value of \$10,000. That would be a mere barter transaction and would not affect the savings of either in terms of money or credit instruments. Or second, which is more likely, Smith may give Jones either money or a check or other credit instruments to the amount of \$10,000. And it is immediately clear that Jones may then have \$10,000 more and Smith \$10,000 less of such money or credit instruments. But is this necessarily the result of the transaction? That is the crucial question, for, if this is not true, then obviously there is not that perfect offset which would make the concept of savings in terms of money and credit instruments valid when applied to society as a whole. What do the facts show?

They show unmistakably that such a payment need not reduce Smith's holding of money and credit instruments at all. In other words the idea that there is necessarily a perfect offset is false. This will be clear if we carry our example one step farther. Suppose that Smith, when he decides to purchase the house from Jones, has the necessary \$10,000 on deposit in his bank, but for some reason prefers not to use it. In consequence, he gets a loan of \$10,000 from the bank, the proceeds of which are paid to Jones. Under such circumstances there is no offset. Jones has \$10,000 more in money or credit instruments than he had before and Smith has the same as he had before.

What of the bank? Does not the loan it makes to Smith reduce its holding of money or credit instruments and thereby provide the offset? Not at all. The bank gets a promissory note for \$10,000 from Smith and merely writes up a deposit credit to the account of Smith for that amount. Smith then draws a check against his account, which he gives to Jones, and—to take the simplest

*for bank deposits based on loans have no offset in goods,*

case—when Jones deposits this check, \$10,000 is simply transferred from Smith's to Jones' account. Thus the bank or the banking system, ends up with, on its asset side, \$10,000 promissory note, and on its liability side, an increase of \$10,000 in deposits. Instead of an offset in a transaction of this character, therefore, the full amount of such a transaction appears as an addition to savings as measured in terms of money and credit instruments. This is true because, to repeat, Smith still has \$10,000 on deposit and Jones has \$10,000 of deposits which he did not have before, nor is this increase offset at the bank since its "cash" holding is exactly what it was before it made the loan.

*and a vast amount of bank credit may increase the supply of money without any increase in real savings.*

But, it may be asked, are not transactions of this character so infrequent as to be wholly insignificant when we consider society as a whole? The answer to this is that the volume of transactions of this character—transactions in which funds are borrowed for the purpose of buying goods—are anything but insignificant. Almost every bank purchase of new issues of bonds, other than refunding issues, and virtually every loan made by a bank, is for the purpose of enabling the borrower to buy goods of one kind or another. Practically every such extension of bank credit, therefore, results in the creation of new deposits at some point in the banking system. This means that practically every such extension of credit increases the supply of money or credit instruments and will appear as an increase of savings as measured in terms of money and credit instruments.

This method of measuring savings, instead of giving us an accurate picture, may, in fact, show that savings are increasing when actually they are decreasing. During war time, for example, government may borrow heavily from banks and use the proceeds to buy all kinds of material which are then destroyed in battle. The supply of goods in consequence, may be sharply reduced—not only the supply in the hands of the public, but the over-all total as well—and yet, because bank deposits or money in circulation increases, a measurement of savings in terms of money and credit instruments would show savings as increasing.



*How We May Avoid Double Counting*

Is there any means by which we can escape this dilemma—any means by which, when we measure savings in terms of money and credit instruments, we can correct for the double counting which may result in such a possible distortion of the actual situation? Obviously there is. The double counting in all cases arises because of the failure to take into consideration the fact that for every dollar of bank credit created by means of loans, discounts, and investments there is a corresponding liability created by the borrower in the form of a promissory note, bond, or some other credit instrument. What we must do, therefore, in order to get rid of double counting, is to consider the entire asset and liability position of the various members and constituent parts of economic society; or, that is, we must determine the changes in the net asset position of our economy as a whole. If we do not do this—if we do not make a deduction for the liabilities—we obviously are dealing with figures which have no reality in terms of the progress or retrogression of our economic welfare as a whole. If we do not deduct liabilities we are guilty of the same kind of economic mumbo jumbo as two bankrupt individuals who exchange promissory notes for \$1,000,000 and then claim that they are millionaires.<sup>1</sup>

On the other hand, if we determine the changes in the net-asset position of everyone and of all constituent elements in the economic system, then combine them into one total, offsetting credits against the corresponding debits, there is no double counting. In this case the man who borrows from a bank, and thereby obtains a larger money balance," does not show up as having greater savings. Likewise, if government borrows from the banks and pays the proceeds over to individuals, the increase in the "money savings" of these individuals is offset by the debt incurred by the government, and so no change occurs in the total. Further, if these individuals then use the money

*The entire asset-and-liability position of an economic society must be considered in measuring savings, or their rise or decline.*

*It is only by accounting of all changes in net-asset posi-*

<sup>1</sup> Incidentally, if these individuals discounted these notes at a bank (which, of course, such private individuals could not do), thereby receiving a deposit of \$1,000,000 each, the measurement of savings used by the Securities and Exchange Commission (see footnote, p. 336) would bear out their contention; that is, the "C" calculation would show an increase of \$2,000,000 in savings.

*tion of individuals, other constituent elements in economic system, and also government, that total savings can be ascertained.*

thus received from the government to pay off a debt their assets and liabilities are reduced by this amount thereby leaving their net-asset position unchanged, and the recipients of the payment have the money or deposits rather than, say, promissory notes, so their net-asset position also is unchanged. Finally, if the individuals use the money to pay for insurance, or to buy stocks or bonds or mortgages, the same situation holds true—they merely substitute one kind of asset for another.

What, then, can change the net-asset position of an individual and thus alter the total volume of savings for society as a whole? There is just one thing that can bring about this result. This is a change in the volume or productivity of goods owned by individuals and the other constituent elements in the economic system. In other words, if there is no change in prices, in order to get a net increase in the net-asset position of society there must be a net addition to our stock of goods. If this occurs and we offset credits against their corresponding debts, we can measure the volume of savings in terms of money and credit instruments and get a figure which will correctly reflect the increase of savings.

But, it will be said immediately, when we do this—when we eliminate everything but changes in the net-asset position of society as a whole, caused by a net addition to our stock of goods—when we measure savings in this manner, we in reality are measuring them no longer in terms of money and credit instruments but in terms of goods. And so we are.

*So, when we offset debts and credits, we come down to measuring savings of an economic society in terms of goods alone.*

Does this mean that the whole idea of measuring savings in terms of money and credit instruments is false? It means exactly that insofar as society as a whole is concerned unless we offset debts against credits, because without this offset, there is no necessary direct relation between changes in the volume of money and credit instruments, on the one hand, and changes in the net-asset position of society on the other hand. Because a farmer increases his herd of livestock, it does not follow that he must increase his bank balance. A man who saves and builds a home does not thereby create any corresponding amount of money and credit instruments. And so on throughout

society. The net-asset positions of individuals, and of our economy as a whole, are constantly changing without a simultaneous and equal change in the volume of money and credit instruments outstanding. Any attempt to measure savings for society as a whole in terms of money and credit instruments which does not offset debits against credits, therefore, as stated earlier, is certain to be misleading.

Such a conclusion of course is obvious when one stops and thinks through the problem. Its only difficulty arises from the fact that we, as individuals, are likely to think of savings as the money we put aside or invest during the year—an increase in our bank balance, the bond or stock we have bought, the payment we have made for life insurance, etc. And we are likely to jump from this to the conclusion that if all of us as individuals have more money, or more deposits, or more government bonds, it indicates that as a nation we are better off. In other words, the question naturally arises in our mind why, if such items properly belong on the asset side of a financial statement of our economic position as individuals, they completely cancel out in a financial statement for society as a whole? We know that a bond represents money which the issuer has borrowed, and so it represents a liability; but what about money—the money we earn as a wage and deposit in our bank? Why is that not an asset for the nation as well as for us as an individual? Money, as it passes from hand to hand, or as it is given to us on payday, represents the payment of a debt—the final settlement of an obligation—not the creation of a debt that remains to be liquidated at some later time. When our employer hands us our pay envelope, he gives us the most usable asset there is—an asset which will be accepted from us by anyone who has anything to sell. In view of this how can we conceive of money as a representative of a debt? Whose debt is it?

*Even money earned as wages is offset as an asset by the debt of the issuing authority, and so is no asset to the nation.*

Well, obviously, money is the debt of the issuing authority—either banks or the government. Suppose our money, instead of being issued, as at present, by only Federal Reserve Banks and the federal government, were issued by one individual or one private company. In these



*When we deposit money in a bank, we merely exchange a promise of the government (or Federal Reserve Banks) for a promise of an individual bank.*

*From the viewpoint of society, nothing but physical goods represents savings—*

*though of course other things than physical savings have economic value.*

circumstances—there have been several instances of such currency in our history—we should recognize immediately that we were dealing with nothing but a standardized promissory note of this individual or company.

So it is with our paper currency at present. It is nothing more than the standardized promissory note issued by either the Federal Reserve Banks or the federal government. And when we deposit these notes with a commercial bank or with a savings bank we do not change the basic character of what we have. All that takes place when we make such a deposit is the exchange of the promises of the Reserve Banks or the government for the promise of the bank in which we deposit the notes. In other words, there is a substitution of one form of indebtedness—paper currency—for another form of indebtedness—deposits.

To us as individuals these various forms of indebtedness are truly an asset—just as our promissory notes are truly an asset to the bank or person to whom we give them—but in every case there is an offsetting liability. When we add up the assets and liabilities of all of us, and of all the component elements in our economy, therefore, all these promissory notes—all money<sup>1</sup> and credit instruments—cancel out, and all we have left are physical goods. From the point of view of society, then, nothing but physical goods represents savings, and if we are to have an accurate measure of savings it must be, and can only be, in terms of goods.

This does not mean that nothing but “goods” is valuable in society, or that one can properly appraise the economic positions of, say, two nations solely on the basis of their physical “savings.” We have enormous and immeasurable national assets which are outside the realm of what may be termed “savings.” Our inventive genius, our “know-how” on the production front, our favorable climate, our political institutions, and our nation’s level of education are examples. Without these elements we could not have approached our present state of welfare.

<sup>1</sup>It should perhaps be repeated that we are using the term “money” to include only “credit money,” not gold.

# Applying the Logical Concept of Savings

Let us now, as the final step in our discussion of savings, attempt to crystallize our reasoning into everyday terms and apply it to our daily lives. For this purpose we may profitably use a hypothetical example.

Suppose you are a cabinetmaker and have a little shop in the basement of your home, equipped with a workbench and the necessary handsaws, chisels, hammers, a square, a level, a rule, glue, sandpaper, varnish, an assortment of nails, brads, and screws, odds and ends of lumber, etc.—in short, the usual stock of tools and supplies that one finds in the modest shop of a cabinetmaker who works to order. All told, such equipment and supplies are worth, if you were to sell them, probably in the neighborhood of \$150, and let us assume that this is the value you place upon your shop. Now let us also assume that you own the house in which you live and that it has an estimated market value, including the land, of \$5,000, against which there is a mortgage of \$2,500. Let us further assume that you have furniture and other furnishings which cost you over the years \$1,000 and which at auction could be sold for \$200, and that you and your family have clothing and other personal belongings for which you have paid \$500, and which in case of necessity you could sell for \$50. Finally, let us assume that you have \$10 in your pocket, \$200 in the bank, and that you have a \$100 government bond and a life-insurance policy with a cash surrender value of \$500. A statement of your financial condition, then, would be as follows:

*A sample individual financial statement would include some items not counted as social assets.*

Cash on hand and in bank . . . . .	\$ 210	Mortgage on home . . . . .	\$2,500
U.S. bond . . . . .	100		
Insurance—surrender value . . . . .	500		
Real estate . . . . .	5,000		
House furnishings and personal belongings . . . . .	250		
Woodworking tools and supplies . . . . .	150	Net worth . . . . .	3,710
Total . . . . .	\$6,210		\$6,210

The question is: What are your savings? You probably would think of your savings as consisting of the cash

you have, the U.S. bond, your insurance policy, the \$2,500 net equity you have in your home, and the \$150 resale value of your shop. In other words you would include everything but the \$250 worth of house furnishings and personal belongings which you own. Wherein, if at all, does this listing differ from the concept of savings developed in the preceding pages? It differs in two particulars.

*Your cash, bond, and insurance would not be social savings.*

The first of these is the inclusion of cash, the bond, and the insurance policy. To you, of course, all of these are assets and in consequence are savings to you as an individual. As we have explained above, however, each of these items is also a liability of someone else. Were we to consolidate your financial statement with those of every one else in the economy, therefore, and offset all credit items against the corresponding liabilities of others, the items would cancel out. In other words, these items, although savings from your point of view, are not savings from the viewpoint of society as a whole.

*Should household furnishings and personal belongings be counted as savings, from viewpoint of society?*

The second particular in which your listing differs from the concept we have developed in the preceding pages is the omission of your \$250 worth of house furnishings and personal belongings. Such omission is in accord with widely accepted practice, but is it correct? On what basis or in what way, does this item differ from the other items which are included as savings?

*They are not used for production—but neither is a dwelling.*

Is it because these items are used for consumption rather than for furthering production? That cannot be the reason because your house is also used for consumption rather than for furthering production.

*They may be no less durable than house or tools.*

Is it that such house furnishings and personal belongings are less durable than the house or the tools in your shop? Again the answer has to be in the negative. The soles of clothes and shoes you are wearing may not last so long as the house but some of your furniture may last considerably longer, and any jewelry that is included among your personal belongings may properly be considered as having an indefinite life.

*They are not on the market, but one's tools likewise may not be.*

Is it because your furnishings and personal belongings have been withdrawn from the market? That cannot be the reason for not considering them as savings.



tools in your shop have been equally withdrawn from the market.

Is it because house furnishings and personal belongings are more difficult to sell? The answer still is in the negative, for actually it probably would be just as easy to sell them as it would to sell the tools in your shop, and perhaps considerably easier than to sell your house. Needless to say you would not get anything like as much for your furniture and clothing as you paid, but this also is true of your tools and it may be true of anything else you own. The only possible difference between the various items on this score is in the rate at which their value may shrink, and, granting that proper allowance is made for this and the correct value is assigned at the moment, one is not justified on this basis in considering some items as savings and others as not constituting savings. Your suit for which you paid \$40 may be salable for only \$4 after you have worn it a week, and the work bench for which you paid \$40 may be worth \$30 after you have used it a year, but at \$4 and \$30 both are equally savings.

Why, then, does accepted usage not include house furnishings and personal belongings as a part of one's savings? It is apparently because we commonly think of saving as being something which is kept back from current consumption for future use, and then fail to follow through the analysis and define clearly just what constitutes "future use." Thus it is concluded that if one receives 100 in wages and spends it all for food and rent there is obviously no saving, and that the same must be true if part of the \$100 is used for the purchase of a new suit or new chair. Those items also represent "consumption." On the other hand, if part of the \$100 is deposited in the bank or is used to buy a new tool for your shop there is saving—saving in the case of the deposit because the money has not been spent at all, and saving in the case of the new tool because it is an economic good.

At first glance, it may be admitted, such a line of thought appears logical. But actually it will not stand examination. The flaw in it is that it fails to distinguish between consumption which immediately and completely destroys goods, such as the eating of food, and consump-

*They are no more difficult to sell than various other things one owns.*

*The only logical line to draw, in defining savings, is between goods*

*immediately destroyed by consumption and goods which continue in use.*

*The aggregate of savings in the nation, then, is the total of all marketable goods.*

*Shifts in ownership of currency and other claims do not constitute savings for society as a whole.*

tion which consists of making continued use of goods such as riding in an automobile. The result is a definition of saving which is thoroughly confusing and may lead to many inconsistencies. For example, if you buy a house, furnish it, and then rent it, the entire outlay, both for the house and the furnishing, is regarded as saving. Likewise if you set up a business of renting dress clothes or costumes, the amount you spend for the clothes or costume would be regarded as savings.

### *The Ultimate Definition*

To have a workable and logically defensible conception of savings, it is clear, we must include all usable goods—include them if we desire to reduce the total to monetary terms, at their current market value. The aggregate volume of savings in the nation thus may be defined as the total of all marketable goods, and there is never an increase or a decrease in the savings of a nation except as there is an increase or decrease of such goods. Variations in the volume of currency, or bank deposits, or insurance, or bonds held by the public, or installment credit, or mortgages, or debts, have no necessary connection with bringing about changes in the volume of savings. There can be an increase in savings only by the production of more goods or values than are destroyed by consumption, and conversely there can be a reduction of savings only by the destruction of more goods or values than are produced. Currency, bank deposits, insurance, etc., are important insofar as savings are concerned, in that shifts in the ownership of these items affect the potential ownership of savings against which these items are a claim and as devices which facilitate the accumulation of tangible goods, but they do not in themselves constitute savings for society as a whole.

With this point in mind we are now in a position to analyze the character of capital.

## II. THE CHARACTER OF CAPITAL

In broad terms the character of capital is easily understood, and the concept offers no particular difficulties.

ties. In a detailed analysis, however, such as is necessary if one is studying the relation of saving to capital formation, many questions arise which can be answered with consistency only by a fairly rigid examination of the meaning of the term in all its ramifications. In view of the preceding discussion, perhaps the easiest manner for doing this is to start with savings and, by dividing them into their various categories according to ownership and use, to determine what part properly may be considered capital.

*We may classify savings according to ownership and use, in working toward a concept of capital.*

### *Public Savings or Property*

We have defined savings as "the total of all marketable goods." The first division that one needs to make in this aggregate, in working to a concept of capital, is according to ownership. Of the total of all goods a vast sum belongs to society as a whole rather than to private individuals or private organizations. This publicly owned property falls into three classes:

*The ownership may be either public or private.*

First is that property which is maintained for the benefit of society as a whole and which the public is permitted to use and enjoy without specific payment. Outstanding in this regard are roadways and waterways, parks, government buildings of various kinds, our public-school system, many of our libraries, and most of our museums, monuments, and public shrines, and so forth. The aggregate value of savings existing in this form amounts to many millions of dollars and to no small extent is an indication of the great productivity and thrift which have characterized our history. This is not to say that every public expenditure of this character is to the public benefit and that the more we have the better off we will be. That obviously is not true. A nation may become bankrupt by erecting too many public monuments just as well as by too much unwise public spending in any other direction. Nevertheless it remains true that, within limits, great benefits are to be derived from the devotion of some of our savings to these public purposes—to purposes which enable the public at large to participate better in the overall productivity of the nation. In fact it has been only because we have devoted part of our wealth to these pur-

*Uses of public property:*

*(1) for free public services;*



*(2) for services paid for directly by users, to cover cost wholly or partly;*

*(3) for profit-making services.*

*Uses of private property: (1) for consumption that is destructive;*  
*(2) for more durable use, but not directly to further production for sale;*

*(3) for furthering production for sale.*

poses that we have been able to attain such great productivity; and, viewed in the large, notwithstanding the wasteful and unnecessary exceptions, there is no question that the savings we hold in these forms are among the most valuable in our whole economy.

The second type of public savings is best represented by toll bridges and the postal system. These differ from those just discussed in that a charge is made for the service performed. This charge may be fixed with a view merely to covering the cost of the service, as in the postal system, or it may be fixed with a view to liquidating the original capital outlay, as in the case of toll bridges. But normally in this type of public property the fee is not fixed with a view to making a profit. In other words, the government undertakes these activities on the assumption that the services are needed and they can more adequately or more economically or more safely be provided by government than by private organizations.

Finally, government may hold savings in the form of goods devoted to the production of other goods or services at a profit. In the United States we rarely see examples of this type of activity.

### *Private Savings*

Privately owned savings also fall naturally into three categories. First may be noted those perishable goods, or more accurately, those goods which are immediately destroyed when they are used. Food is a good example.

Second are these goods which are durable, or from which we get satisfaction through use extending over a period of time rather than by immediate consumption. Our clothes, house furnishings, homes, automobiles, jewelry, etc. all fall in this category. So also the flowers we grow for our own satisfaction, or tools which we use as a hobby, or stamps which we collect.

Finally there are those goods which we use for furthering the production of other goods or services for sale. Our factories, machinery, tools, farms, and productive livestock are examples.

### *Which Classes of Savings Constitute Capital?*

Now which of these six categories properly may be considered "capital"? That depends largely on how broad a definition we desire. We could, if we liked, include everything and thereby make capital and savings synonymous. For the purpose at hand, however, namely, analyzing the relation of saving to capital formation, it is better to use a more restricted definition. Specifically, our purpose is best served by using the term "capital" to apply only to that portion of savings which is used for furthering the production of other goods or services for sale. That means, on the one side, that we exclude social savings in the form of parks and other noncommercial undertakings, and, on the other side, exclude private savings in the form of perishable goods or goods which are not used for commercial purposes. As we shall use the term "capital" hereafter, therefore, it connotes only those savings devoted to "business" purposes and, since we are concerned with saving and capital formation in the individual enterprise system, we shall limit our analysis to that capital owned by private persons. Such a definition obviously excludes from the category of capital all owner-occupied dwellings. This is an enormous item in the savings of the nation, but logically it is impossible to count such dwellings as capital without also including the furniture in such homes, the clothing of the occupants, etc., and thereby ending up with a definition of capital which is synonymous with savings. For some purposes such a broad conception of capital may be valid, but clearly it is worthless from the point of view of analyzing the problem of savings and their conversion into capital.

To repeat, then, capital, as we shall use the term hereafter, is that portion of saving which we devote to furthering production of goods and services for sale, as contrasted with that portion which we have consumed or are in the process of consuming or using for purposes not directly related to furthering production of goods and services for sale. The volume of capital as of any given time, then, can never exceed that portion of savings which has been withheld from consumption. The only method

*Only savings used for furthering production of other goods and services for sale are considered "capital."*

*And in this study only capital owned by private persons will be a subject of analysis.*

*Such capital can be increased only by devoting more savings to furthering production or by reducing proportion of current production we consume or set aside to consume.*

by which we can increase the supply of capital is either by devoting a larger proportion of our accumulated savings to furthering production or by reducing the proportion of current production we consume or set aside for future consumption.

### *Is Bank Credit Capital?*

*By this criterion increase of bank credit or currency or securities does not directly increase supply of capital.*

Such a conclusion means that we do not directly or necessarily increase the supply of capital when we increase the volume of bank credit or issue more currency or float more securities. This is a point upon which there is widespread confusion today. Many persons take the position that banks can "create" capital. It will be well, therefore, to follow through this thought in some detail.

For this purpose let us carry forward the assumption that you are a cabinetmaker with a small shop, containing tools and supplies worth \$150, in the basement of your house. Let us assume that, because the number of orders coming to you is increasing, you decide it would be profitable for you to get some small power tools. Specifically you want to buy a 10-inch circular saw, a 6-inch joiner, a jig saw, a wood lathe, a drill press, and a portable electric sander. All told, let us say, this equipment will cost you \$500. You have, it will be recalled, \$200 in the bank, but you prefer not to use it for this purpose; so let us assume that you ask your bank to make you a loan of \$500 and that the bank agrees to this, and hence takes your promissory note for \$500 and credits your account with this amount. You then buy the various machines and pay for them by drawing the necessary checks against your account. The capital invested in your shop, thus, becomes \$650. And the whole increase in your assets has been due to the loan you obtained from your bank. Does this not mean that the bank has created \$500 of capital?

*A bank loan, however, may expedite an advantageous transfer of capital.*

Clearly it means nothing of the kind. All the bank has done is to enable you to transfer \$500 worth of machinery from someone else—a dealer—to you. This, of course, is of utmost importance to you, but it does not alter the fact that the loan has not created the machinery and, since it is the machinery which constitutes your



capital, it follows that the bank has not created the capital. In other words it is the manufacturer of the machinery and others back of him who have saved and thereby created the capital. The bank loan merely enables you to obtain this capital from the manufacturer.

But this is only one, and by all odds the simplest, question which arises in connection with banks and the "creation" of capital. Let us suppose that after getting the machinery your orders continue to increase and you decide that the time has come to expand your shop. So you draw up plans for the construction of a small building in your back yard which will give you enough room to employ two assistants. But again you will need money—say \$500 for the building, and a further \$250 out of which to pay the wages of your assistants pending the receipt of payment for the furniture they make. In other words, to use customary terminology, in order to carry out this expansion you need \$500 for fixed capital and \$250 for working capital. So again you approach your bank, and let us assume that it makes you a loan of the full amount, and you build the new shop and hire the two assistants.

*Or bank credit may be used by borrower directly to create capital.*

The "capital" in your shop is now the original \$150 for hand tools, etc., \$500 for your power machinery, \$500 for the building, and \$250 of "working capital," or a total of \$1,400. This last increase of \$750, too, it will be noted, is not a question of getting a loan from the bank and just buying goods which already are in existence. In this instance \$500 of the loan is used to create a "capital good," the new building, which as a building was not in existence before, and would not, and we may assume could not, have been brought into existence except for this loan; and the remaining \$250 is not converted into a "capital good" at all, but is used solely as "working capital" in the form of "cash." We have a case, therefore—which is the purpose of carrying the example to this point—where, on the one hand, as a result of a bank loan, "capital" in the form of goods is actually "created," and on the other hand, "capital" is provided which insofar as you are concerned is used only in the form in which it is "created" by the bank, namely, currency or a bank deposit. Is it not evident, then,

that under such circumstances the bank truly "creates capital"?

To answer this question we have to go back to the concept of capital itself. Just what is capital? Is it, as we stated above, savings which are devoted to the furthering of production of goods and services for sale? Or does the concept of capital also properly include the claims against savings which are devoted to such furthering of production?

*Currency also is only a claim against savings, may be used to create social capital, but is not itself either savings or capital for society as a whole.*

First, it may be noted that beyond any question it is possible to use mere claims against existing savings for furthering production. This is exactly what has happened in the assumption we have just cited of your borrowing \$500 and using it to pay for the construction of a new shop. It also is what would have happened had you used the currency you receive in payment for your cabinets to pay for the new building, for it will be remembered that currency is nothing but a claim against existing savings. The issue, thus, is whether currency or bank deposits when devoted to furthering production constitutes capital. Certainly they are so regarded by the individual, just as he regards such claims against goods as savings. But we have found that for society as a whole these claims do not constitute savings. Is it also true that they do not, and cannot, constitute capital from the point of view of society as a whole?

*As used in business, bank deposits or currency may help to create capital or fail to create it, but credit instruments, whether issued by banks or government, are not additions to supply of capital in society as a whole.*

The answer definitely is that such claims do not and cannot constitute capital from the social point of view. Suppose that the \$250 you borrow to pay your assistants proves to be wasted—that the work they do proves to be absolutely worthless. The bank credit is still outstanding—for you have merely transferred it from your account to your employees—but you certainly would no longer consider that you have this \$250 of capital. Or suppose that, just as you get your new shop constructed, it burns to the ground. Again the bank credit is still in existence, but again you would no longer consider you have this \$500 in capital. Rather, what you have in both instances is a debt—a debt which you can pay only either out of past production or out of future production. And in that fact lies the principal reason for confusion on the question

whether banks, or the government, by the writing up of deposit credits, or by the issuance of currency, can create capital.

They can facilitate the creation of capital and they can anticipate the creation of capital, but the credit instruments they create are not capital. And just as an increase or decrease in these liabilities is not necessarily an indication of whether the savings of the nation are increasing or decreasing, so an increase or decrease of such liabilities for the purpose of furthering production is not necessarily an indication of whether the capital of the nation is increasing or decreasing. There is an increase in the savings of the nation only when there is an increase of unconsumed goods; there is an increase in the capital supply of the nation only when there is an increase in the volume of unconsumed goods which is devoted to furthering production of goods and services for sale.

Does this mean that it is socially futile and unwise for banks to extend credit for what are customarily termed "capital purposes"? Before discussing this question we need to clear up two additional points: (1) the character of investment and hoarding and (2) the question of the possibility of "oversaving."

### III. THE CHARACTER OF INVESTMENT AND HOARDING

In approaching the question of investment and hoarding it is imperative to recognize one fundamental problem of terminology. Savings, as we have indicated above, are one thing from the point of view of the individual, and quite a different thing from the point of view of society. In other words, to repeat, money and bank deposits and bonds and other such assets all represent savings to the individual, but they are not savings for society as a whole, because against each of these items there is necessarily a corresponding liability. As individuals, however, we do our saving for the most part in terms of money or bank deposits, and when we make what to us is an investment it may be, and frequently is, merely the conversion of this money or bank deposit into another

*Increase or decrease of liabilities may not mean increase or decrease of the nation's capital.*

*Individual savings in money or bank deposits may be converted into other credit instruments without*



*affecting total supply of savings or capital directly.*

form of credit instrument, such as a bond. The whole saving and investing process from the point of view of an individual may thus be carried through without actually touching savings from the social or goods point of view. Even though it is true, therefore, that it is only real savings, or goods, which can constitute capital, we have no choice but to analyze investment and hoarding from the point of view of the individual. This means that in this particular section of our discussion when we use the term "savings" it always refers to savings from the individual point of view.

### *Are Savings and Investment Normally Balanced?*

*Saving is refraining from consuming; investment is putting savings to use in furthering production.*

In a word, it may be said that saving is the negative act of not consuming all of one's income, and investing is the positive act of putting such savings to use in furthering production of goods or services in the hope of gaining a monetary reward. It used to be commonly assumed that, by and large and after allowing for a time lag, such positive action followed the saving simply as a matter of course. That is, it was taken for granted that, in general, when a person "saved" in the form of money he would either make a direct investment for his own account, thereby converting his "money savings" into "goods savings," or else would deposit his savings in some institution, probably a savings bank or building and loan association, which, in turn, would invest the funds in one way or another and so convert the "money savings" into "goods savings." In other words, savings were thought of in a much narrower sense than we have defined them above, and as a result saving and investing were regarded as practically equivalent insofar as amounts were concerned. It was maintained, therefore, that it made comparatively little difference, if a person was desirous of trying to determine the amounts involved, whether he made his measurement in terms of saving or in terms of investing.

*Savings and investment have been theoretically regarded as normally equivalent in amount.*

Whether, even with this limited definition of savings, such a conception of a one-for-one relation between saving and investing was ever actually true in practice is open to question. But, be that as it may, it certainly is not true unless by accident in the sense in which we have defined

*If ever true, this theory is not true in modern economy.*

the terms. There are three reasons why this is so. Two of these reasons are on the side of saving, the other on the side of investing.

One of those on the side of saving we already have discussed at length. It concerns the consumption of savings. As we have pointed out, savings include everything and anything which adds to the net worth of an individual—consumption goods as well as capital goods—clothes and furniture, or even a house, as well as tools or a factory. Now one may say, of course, that he is “investing” in a new suit of clothes or a new chair. But that is not ordinarily what is meant by the term “investment.” Ordinarily when one thinks of making an investment he thinks of putting his savings into something from which he will get a monetary return either as interest or as profit, or at least into something which is capable of yielding such a return. A chair which one buys for his living room does not fulfill this requirement. Unless we broaden the definition of investment much beyond its generally understood meaning, therefore, we must recognize that there is constantly saving in society which is never invested.

On the saving side the second discrepancy between saving and investing is hoarding. Hoarding may be of various kinds and for various periods of time. But all hoarding has one thing in common; namely, that the one responsible for it is attempting not to get a monetary return or profit from his ownership of the thing hoarded, but simply to maintain the wealth he already possesses.

If a farmer believes, for example, that the price of corn is going to increase in the next few months and therefore refuses to sell his crop at current prices, he is not hoarding. He is making an investment in corn—making an investment just as truly as the commodity trader who enters the market and buys for the purpose of selling at a higher price at a later date. Likewise if one believes that, because of a decrease in the price level, money will become more valuable, and hence he decides to hold back his expenditures, he is not hoarding but rather is following a course of action which he believes will enhance his net

*There is a large amount of savings, as we have defined the term, which is never invested but applied to consumption.*

*A part of savings also is boarded.*

*Withholding goods or money for rise in value is a form of investment, rather than boarding.*

*Hoarding should be defined in terms of motivation, and varies with public confidence.*

*On the other side, investment may rise in proportion to savings, through bank loans.*

*So savings and investment may, and usually do, vary widely.*

worth or real savings as measured in command over goods.

Hoarding, in other words, is not an action which can be defined in terms of the form it takes. It has to be defined in terms of its motivation, and this motivation, as mentioned above, is the attempt merely to husband, or protect, or maintain the wealth he already owns. It follows that in periods of uncertainty and fear of the future, the volume of hoarding may be expected to increase, whereas in more settled times, when almost everyone is optimistic concerning the future, hoarding may be quite insignificant and more or less offset by dishoarding. Nevertheless, we may be sure that at all times there is hoarding by some individuals—and to the extent that savings take this form they are not paralleled in investments.

The third factor we mentioned above which invalidates the one-for-one relation between saving and investing—the factor which is on the investing side—is investment made by means of a bank loan. Such a loan, of course, does not constitute savings, even from the individual point of view. Yet it is possible for such a borrower to make an investment; that is, to use the proceeds of the loan to build a machine or buy common stock or bonds or anything else which in his opinion will yield him a monetary gain.

To summarize this part of our discussion, then, we may say that saving is one thing and investing is something which is quite different. In perhaps the majority of cases it is true that saving precedes investing and in this sense the two are related. But this is not necessarily the sequence. There may be, and constantly is, saving without investing; and there may be, and frequently is, from the individual point of view, investing without a preceding saving. It is unrealistic, therefore, to speak of the desirability or necessity of saving and investing being equal. Unless one defines saving and investing as simply the opposite sides of the same transactions, which manifestly is a useless procedure, the two are never equal, unless by accident.

### *Changing Ratios of Savings and Investment*

Such a conclusion, however, does not mean that the degree of inequality, or changes in the degree of inequality,



as between saving and investing, are unimportant. On the contrary the exact reverse is true. One may go so far as to say that changes in the degree of inequality between saving and investing, when they are of substantial magnitude, are one of the most important factors leading to serious dislocations in our economic system.

As we have noted above, saving may exceed investing for either of two reasons: the purchase of consumption goods or hoarding. It is assumed not infrequently that as a cause of economic disturbances only the latter, hoarding, is of any particular importance. Actually, however, a major change in either the proportion of the national income or the total amount spent on consumption goods can be of the utmost importance in the functioning of the economy.

Let us assume that the economic system is running along at maximum capacity with approximately 80 per cent of the national income being used to pay for services and for the purchase of consumption goods, and the remaining 20 per cent going into investment in the form of new plants, equipment, etc. Then let us assume, what in actual life is almost unthinkable, that for some reason the proportion devoted to investment increases to 50 per cent. Obviously this will cause a substantial wrench in the economic system. On the one side there will be appreciably less income devoted to the purchase of consumption goods and to the payment for services, and on the other side, as a result of the increased investment, there will be presumably, in due time, appreciably more goods produced and offered for sale. Under such circumstances, if the goods are to be sold, prices will have to be lowered. In some lines of production, as a result of technological improvements, this may be feasible. But in many other lines this will not be true. Any reduction of prices in these cases will mean, unless costs can be equivalently lowered, that profits are correspondingly reduced; and, needless to say, there is a limit beyond which this process cannot be carried without bankruptcy of the concerns so affected. Thus a major increase in the percentage of the national income devoted to investment, rather than to the purchase of consumption goods, may well lead to an economic disturbance of the first magnitude. Fortunately, such major changes ordi-

*Changes in the ratio of saving and investing are important factors in our economy.*

*A major increase in percentage of national income devoted to investment, rather than to purchase of consumption goods, would create great economic disturbance.*

*And a major change in the opposite direction, away from investment to consumption, may be equally disturbing.*

narily do not occur, and such minor changes of this character as do take place occur so slowly that the economy has an opportunity gradually to make adjustments to counteract them. But this does not alter the basic accuracy of the statement we have just made.

If the change is in the other direction—that is, if less of the national income is devoted to investment and more to consumption—it also will necessitate readjustments that may have serious and far-reaching effects. The first effect of such a change is to increase the demand for consumption goods. This may be met either by a rise of prices or by increased production. Presumably this will mean increased profits, unless costs of production, say as a result of higher wages, advance correspondingly. Such increased profits—or increased wages, if that is what happens—would provide the wherewithal for expanding production through additional investment. But in the circumstances we are now discussing such investment for some reason does not take place. In consequence our productive equipment not only will not be expanded to keep pace with the increased demand, but actually will show a steady relative deterioration. Those concerns whose business is the production of capital goods will find a decreasing demand for their product; and, although the producers of consumption goods may for a while enjoy unusual prosperity, the producers of capital goods will be faced with declining profits, and this trend theoretically might continue until a large section of the economy is bankrupt. Thus the ill effects of a substantial increase in the proportion of the national income devoted to consumption goods may be just as disturbing to the smooth functioning of the economy as a change in the reverse direction.

### *Hoarding*

Hoarding creates a problem of much the same kind. As we have noted, one may hoard either in the form of commodities or in the form of money or money instruments—that is, claims against commodities. In the former case, hoarding of commodities, the immediate effect on the

economy is to sustain the demand for goods, perhaps even to increase it. Such hoarding thus has no immediate ill effects upon the economy. Hoarding of money or demand deposits is, however, of quite a different character. Our economic system fundamentally operates on the basis of the exchange of the products of one person for the products of another—on the exchange between everyone as a producer and everyone as a consumer. It is truly the taking in of each other's washing, except that, instead of trading one batch of washing directly for another, we as individuals exchange for money the batch that we wash and then use this money to pay for the batch that someone else washes for us. The effect of hoarding is equivalent to the result of a demand by a group of us that we be paid for the washing we do, although we refuse to give our clothes to others for them to wash. The effect of this action is, of course, to eliminate the income of those who formerly did our wash—to throw them out of work—and soon they will have to stop sending their wash to us and we too shall be out of jobs, and our economic system will go into a tailspin.

Hoarding of money, in other words, differs from the hoarding of goods in one important particular. This is that although hoarding of goods may upset the economy, because of the change it makes in the way in which the national income is spent, it does not immediately reduce the aggregate demand for goods, whereas monetary hoarding reduces the total demand for goods. In the former case goods continue to move from producer to a buyer—to the hoarder. In the latter case there is no such flow through the market and, in consequence, the goods pile up on the shelves of the producers. Hoarding of money, in other words, causes producers and distributors involuntarily to accumulate larger inventories, whereas in the hoarding of goods the accumulation by the hoarders is entirely voluntary. Thus the hoarding of money immediately affects the volume of business; and, since there is a limit to the accumulation of goods on the shelves of business, it is inevitable that such piling up of inventories sooner or later will result in an increase of unemployment.

*Hoarding of commodities has no immediate ill effects on the economy, but hoarding of money or demand deposits immediately affects the volume of business unfavorably.*



## *Summary of Relations of Saving and Investing*

Broadly considered, then, the relation of saving to investing may be summarized in a series of points, as follows:

**Summary: 1. Saving and investing are never equal.**

**2. Sudden and major changes in ratio, however, are disturbing.**

**3. Increased ratio of investing tends to reduce demand for consumption goods.**

**4. Increased ratio of consumption tends to reduce demand for capital goods.**

**5. Hoarding of goods sustains demand temporarily.**

**6. Hoarding of money reduces production and employment.**

1. Saving and investing, it is safe to assume, are never equal. A substantial portion of the national income constantly is devoted to consumption goods, and as of any given time much of this appears as savings. This tends to keep saving in excess of investing at all times. This tendency may be further augmented by hoarding either of goods or of claims against goods. On the other hand, through the use of bank credit, an investment may be made without a corresponding saving having been made by either the investor or the bank. To the extent this takes place it tends to offset the amount by which saving, in the form of consumption goods or hoarding, exceeds investing.

2. Although the totals of saving and investing are never equal, unless by accident, sudden and major changes in the degree of inequality caused by changes in the proportion of income saved are matters of importance in the operation of the economic system. This is because every such change wrenches the economic system either up or down to a greater or lesser degree as a result of its effect upon the supply of, and demand for, goods.

3. If the change in the relation of saving and investing results from a greater proportion of the national income being invested, the demand for consumption goods will decline and that portion of our economy will tend toward depression.

4. If the change is the result of a greater proportion of the national income being devoted to consumption goods, the capital goods section of our economy will tend to become depressed.

5. If there is hoarding of goods it sustains the demand for goods, and results in no immediate ill effects upon the economy.

6. If there is hoarding of money, or claims against goods, the effect is to cause goods to pile up on the shelves of producers, which if continued is certain to lead to lower production and unemployment.

7. The over-all point: The proper relation between saving and investing is not something which can be determined mathematically or statistically, or which can be forecast and made the basis for a sound national policy. The proper relation is that which to the greatest possible degree satisfies, on the one hand, the demand of the public for goods and, on the other hand, the desire to save and attain an income from savings. The specific relation between saving and investing which yields this result is not static. It changes as the public attitude changes toward using its income for consumption or investment. If these changes in public attitude are not too great and are gradual, the economic system can adjust itself to them without undue hardship. On the other hand, if changes in the public attitude are substantial and sudden, the adjustments are likely to involve the upheaval of a boom or a depression. To have a smooth-running economy, therefore, it is essential to prevent such sudden changes in the attitude of the public.

What is likely to cause sudden and drastic changes in the attitude of the public on investing? That is a question which involves the whole explanation of business fluctuations, which we have discussed in Chap. XVI. Here it must suffice to mention that outstanding among these causes are wars, natural disasters, unduly restrictive or explosively expansive government or labor policies, too sudden technologic changes, the misuse of bank credit, or any other developments that undermine or inflate public confidence. But there is one further point in this connection which we need to analyze before turning to the problem of the relation of bank credit to investment. This is the possibility of attempting to offset changes in the attitude of the public on how much of their income and savings they will hold in consumption goods and hoarding and how much they will invest.

*7. The proper ratio between saving and investing is not static, depends on public attitude, and may change without seriously disturbing the economy, if change is not too great or rapid to interfere with smooth adjustment.*

*Causes of sudden changes in public attitude are wars, natural disasters, unduly restrictive or expansive acts of government or labor, rapid technological changes, misuse of bank credit, or anything else affecting public confidence.*

#### IV. THE PROBLEM OF "OVERSAVINGS"

In recent years a school of thought has developed in this country which contends that the United States has become a "mature economy," and that in consequence

*Do we have a "mature economy" with-*

*out adequate investment opportunities?*

*This notion became a factor in public policy during the thirties.*

*Here we analyze the conclusion that, for full em-*

there are no longer adequate private investment opportunities to absorb the savings of the public. It is concluded therefore, that from here on it will be necessary for the government to borrow or tax away the "excess" if we are to maintain full employment.

That there should be persons who find that all our economic ills are to be accounted for by such a simple reason is neither surprising nor in itself of any particular importance. In the field of popular economics oversimplification and spectacular "solutions" of our troubles are the rule rather than the exception. What makes this contention so significant, and worthy of analysis, is that during the decade of the thirties this attitude became a powerful factor in public policy, and that, since many of the principal advocates of this thesis have continued in official or otherwise influential positions, the idea is still being pressed for application to postwar problems.<sup>1</sup>

In Chap. XVIII we analyze in considerable detail the view that we have reached economic maturity. As we point out there, this contention is based upon three premises: (1) that our geographical frontier has disappeared; (2) that our rate of population growth is declining; and (3) that there is no big new industry in sight, comparable to the railroad or automobile industry, which would be capable of absorbing our savings and providing full employment.

In our judgment none of these premises is valid in the sense in which it is interpreted by the members of the "mature economy" school of thought. It is not our intention, however, to repeat these arguments at this point

<sup>1</sup> Outstanding among the advocates of this thesis have been Alvin Hansen for some years a consultant of the Board of Governors of the Federal Reserve System and formerly also connected with the National Resources Planning Board; Laughlin Currie, formerly assistant director of the Division of Research and Statistics of the Federal Reserve Board, and more recently special advisor on monetary problems to President Roosevelt; and Adolph Berle, a member of President Roosevelt's original "brain trust" and more recently Assistant Secretary of State. Outside the government perhaps the most articulate advocate of this thesis has been Stuart Chase. His views have been most fully presented in a series of books on the postwar period prepared for and published by The Twentieth Century Fund.

A thorough-going refutation of this thesis was made by George Terborgh in *The Bogey of Economic Maturity*, Machinery and Allied Products Institute, Chicago, 1945.



Rather, we propose to look at an entirely different phase of the issue. Specifically we are interested in analyzing only the conclusion of this group: that henceforth there will be an excess of private savings in this country and, in consequence, if we are to have "full employment," government must collect this "excess," either through taxation or by borrowing, and inject it back into the economy by a spending program.

*ployment, government must collect "excess" savings and spend them.*

### *What Are "Excess Savings"?*

We may properly begin this analysis by asking the simple question: What is an excess of savings? "Excess" is a comparative term. It means more than is needed, or can be used, or than it is wise to use, or some other such standard of reference. Now what are our savings supposed to be in excess of? The advocates of the thesis we are discussing say that our savings are in excess of investment opportunities. But such a statement obviously really tells us nothing. "Investment opportunities" is not a static, measurable concept, the component parts of which can be added up with definitude as one adds up the miles of railroad track or the number of men on a baseball team. What one man considers an "investment opportunity," another man considers a gamble of the wildest kind which only a financial incompetent would go into. And what a person considers an "investment opportunity" in one set of circumstances may not appeal to him at all in another set of circumstances. When Henry Ford conceived the plan to turn out a low-priced automobile by mass production methods, he saw an investment opportunity in which he was willing to risk every penny he owned and all he could borrow, but he had a hard time convincing others that he was right. And thousands of ventures which were attractive with low income-tax rates have become unattractive as the rates have skyrocketed.

*"Investment opportunities" are not statistically measurable, but depend on personal attitudes and impulses in various circumstances, looking to the future,*

In other words, it is meaningless to speak of savings exceeding investment opportunities. Savings represent something already accomplished—the measurable result of past action. Investment opportunities are of the future—they are a reflection of, and grow out of, men's hopes as

*while savings are measurable, the results of past action.*

to what will happen. One can no more measure these hopes and compare them statistically with past savings than he can measure a dream world and compare it statistically with the world of reality.

So much for the confusion of terms as used by the advocates of the "excess-savings" concept. Needless to say such confusion is significant and by itself is adequate justification for questioning the whole thesis presented by those persons. But for the moment let us overlook that and give them the credit of really having something important in mind, even though their exposition clearly is faulty. What can this something be? What is the statistical evidence that leads which leads them to conclude that we have an excess of savings?

*The evidence used as basis for "excess-savings" concept is comparison of past savings and past investment totals.*

This statistical evidence is the volume of monetary savings. The members of this school find that in terms of dollars the American public is "saving" so and so many billion dollars. They then compare this with the amount of dollars which we have invested over the past years. Since the savings figure is larger than the investment figure, they conclude the difference is an "excess"—an excess which must be siphoned off by government and reinjected into the economy.

Now let us look at this line of reasoning. Obviously there are three points involved: (1) the volume of "monetary savings," (2) the volume of investment, and (3) the possibility of governmental action keeping the two in equilibrium.

### *Are "Monetary Savings" Counted Real Savings?*

*But computation of past savings is made on fictitious basis of monetary savings.*

We already have analyzed at length (pp. 343-348) the concept of monetary savings. As pointed out there such a concept is fallacious from the point of view of society as a whole, because the money and money instruments in which such savings are embodied are mere claims against goods, and it is the goods themselves which constitute savings. In other words, we have maintained that a nation does not become more wealthy, for example, by increasing the volume of mortgages on the people's homes. It increases its savings and becomes more wealthy by building more homes. Now what does this all mean in

regard to the "excess-savings" thesis? It means simply that the volume of savings as measured by the members of this school of thought is socially fictitious. To use it as a basis for concluding that saving is excessive is, to revert to an analogy we used earlier, much like two bankrupt men exchanging \$1,000,000 promissory notes, rediscounting them at a bank, and then worrying over what they can do with all this "saving."

But, it will be maintained, although an increase of money and money instruments may not be savings from the viewpoint of society as a whole, these are savings insofar as the individuals who hold them are concerned. To these individuals the savings are real—real in the sense that they can be used for the purchase of anything that is for sale. And this, of course, is correct. But fundamentally that does not change the situation. It does not mean that savings in our economy are excessive. It merely means that the liabilities we have created against existing savings are excessive—excessive as compared with the past record, or perhaps as compared with the volume which can be carried by society without a readjustment of values. The only possible solutions of the situation are these alternatives: (1) to exercise the claims represented by these liabilities and in this way bring about such readjustment of prices or investment return as may be necessary to bring the volume of such liabilities back into a workable balance with the assets—real savings—against which they have been issued; or (2) to stop the issuance of such claims and permit production to "catch up" with the volume of claims outstanding, which by and large is what was done with greenbacks following the Civil War.

*Such a computation may rather show excessive liabilities in relation to savings.*

*This condition calls for reduction of liabilities or stoppage of further issue until production "catches up."*

### *What Are the Factors of Investment Volume?*

The second of the three points involved in the "excess-savings" argument refers to investment. The contention, to repeat, is that there will not be enough "investment opportunities" to absorb the savings, and the proof which is offered is the past record of actual investments. We have already commented on the inability of anyone to determine statistically the "volume" of investment oppor-

*Past records of actual investments do not measure investment opportunities past or present.*



*What factors largely control volume of investment?*

*(1) Supply of available funds;*

*(2) degree of confidence in the future;*

*(3) possibilities of profit or satisfactory income from prospective investment;*

*(4) prospect of keeping substantial part of earnings from investment.*

tunities. Now let us consider what it is that determines the volume of actual investment.

In general we may distinguish four factors which largely control the volume of investment. First, and primary, is the supply of funds. Numerous factors have bearing on this: taxation, distribution of the national income, reserve position of our banks, interest rates, etc. For the present purpose, however, all we need to note is that, if funds are not available, obviously an investment cannot be made, regardless of how attractive the venture may be.

Second of the factors that may be listed is confidence in the future. If one does not have confidence—confidence in the broadest sense of the term—he hoards his claims against goods—his “money savings”—rather than risking them in some venture, even though he is convinced that under favorable conditions the venture would be highly successful. Needless to say, confidence is not something which is absolute. One is more or less confident. And as one is more or less confident the particular investment he is willing to make vary.

Third of the factors affecting investment is the chance not merely to avoid losing one's savings, but also to make a profit or get an income from a prospective venture. People make investments, not for some esoteric reason, but for the purpose of having their savings yield them an income. As this possibility is increased or decreased—and there are a thousand things which can influence it—those with savings are more or less inclined to make an investment.

Also there is the question how much of his profit the investor will be able to keep, even if the investment he is considering turns out successfully. If practically everything he makes will be taken away from him in taxes, or if so much will be taken that what would be left is too small in relation to the risk of loss, obviously an investment will not be made.

The relation of all this to the “excess-savings” contention must be obvious. It is that, as each of these four factors changes, the volume of investment will change. Consequently the past record of actual investment does

not provide a basis for drawing any conclusions about the future, unless it is assumed that these four factors will be exactly the same as at present or as they were in the earlier period. And quite clearly there is no foundation for such an assumption. Every single one of the four has been altered to a major degree over the past few years and will continue to vary in the years ahead. Take the simple matter of the tax rate. No one certainly would assume that the volume of investment would remain the same if taxes were increased from an average of, say, 20 per cent to an average of 60 or 80 per cent or if they were reduced to 50 per cent of the present level. Using the past record on investments to prove that there will be "excess savings" in the future is thus utterly without foundation.

*These four factors are subject to change, have changed, and will continue to change.*

### *Can Government Spending or Taxing Maintain Equilibrium?*

If the statistical base for calculating savings is wrong, and if the statistical base for determining possible future investments is wrong, what, then, is left of the argument of the oversaving school of thought? There is this much left. If, on the one hand, government, through a spending program, greatly increases the volume of money savings in the hands of the public, and if, on the other hand, it simultaneously imposes all kinds of restrictions and taxes, and otherwise follows policies which aggravate hoarding and undermine confidence to the point where individuals are unwilling to risk their funds in long-term ventures, we unquestionably can create a situation where money savings are in excess of investment. And that, of course, to no small extent, is exactly what happened in the United States during the thirties.

*Experience has shown, however, that excess of "money savings" over investment can be created by government spending to increase supply of money combined with other policies that undermine confidence.*

Is the solution of this situation to be found, as the "excess-savings" school maintains, in having government either tax or borrow these "excess savings" away, or is it to be found in some other direction? Obviously the solution is to be found in some other direction. You do not eliminate excess fat by eating more and more food. In the same way you do not restore confidence by perpetuating and aggravating the conditions which undermined confidence in the first place.

*Under a system of individual enterprise, government cannot, by spending, counteract changes in public attitude toward consumption and investment.*

*Government spending may create business activity, but not such as will counteract hoarding and unwillingness to invest.*

*A fair balance among the component parts of the economy, essential to smooth opera-*

Our conclusion, then, is that it is not possible, under a system of individual enterprise, for the government by such devices as a spending program successfully to counteract changes in the attitude of the public on how much of their savings they will hold in consumption goods or hoard in the form of claims against goods, and how much they will invest. For example, if the public withholds a billion dollars of its income from the market in the form of money, the record shows that the government cannot counteract the effect of this hoarding by creating an additional billion dollars of such claims and pumping it into the economy by means of, say, a public-works program. Likewise if those persons who have large incomes, and consequently relatively large savings, find there are no attractive outlets for their savings, government cannot counteract the effects of such idle funds by taxing away the surplus and, through government spending, injecting it back into the economy in such a way that it will get into the hands of those who will use it.

This does not mean that government spending will not create business activity. Of course it will. Theoretically it might even create as much business activity as there would have been had the hoarding not occurred. But to counteract hoarding or withholding of funds from investment in a true sense it is not enough that government spending merely increase the volume of business activity; the spending must result in exactly the same type and amount of business activity that would have taken place had there been no hoarding. In other words, if a man is starving to death on Third Avenue it does not counteract his plight to feed someone on Fifth Avenue twice as much. Or if an apartment house burns down in New York City its effects cannot be counteracted by building another apartment house in Los Angeles.

Such proposals for government spending to counteract the effect of hoarding or the withholding of funds from investment, in other words, proceed upon a concept of the economy and the way it operates that is far removed from reality. Those who advance such ideas think of a billion dollars as just a billion dollars, the ownership and use of which make no difference just so long as it is used.



Our economic system is not so simple. It operates smoothly and most efficiently only when there is a reasonable balance or relationship between the component parts. And in the United States this is a balance which arises from the hopes and efforts, and fears, and plans, of the many millions of producers of goods and services. If for some reason persons start to hoard, the necessary balance will not be reestablished by pumping an equivalent amount of purchasing power into the economy at some other point. The balance can be reestablished only by creating those conditions which will reestablish the public's confidence and thus put an end to the hoarding. And this will remain true so long as we are a democracy.

Under a system of statism, of course, the wishes of the people are overridden, and they have nothing to say about what proportion of their income they can save, or about what they must do with what they are permitted to save. In these circumstances a "balance" may be established and maintained between saving and investing, or, more accurately stated, the same degree of "imbalance" may be perpetuated. But this is not possible in an economy in which citizens are free to make their own decisions.

## V. THE RELATION OF BANK CREDIT TO INVESTMENT

We come now to the other side of the problem of saving and investing. Up to this point we have been analyzing the effects of changes involving the amount and use of savings—the effect of devoting more or less of one's savings to the purchase of consumption goods, to hoarding, or to investment. We now need to consider what happens when investment increases through the extension of bank credit; that is, what happens when we have investment by individuals or privately owned concerns, or by government, which precedes rather than follows saving. This is the problem which is involved in proposals of having government provide "capital" needed for industrial expansion or for keeping existing plants operating. For simplicity, however, and in order to keep the analysis from getting confused with the issue of government ownership, let us approach the question in terms of an individual borrowing

*tion, is not re-established by pumping purchasing power into one part while confidence is not restored in another.*

*In a totalitarian state, an imbalance may be maintained, but not in an economy where people can make their own decisions.*

*What happens when investment by individuals, banks, or government precedes saving?*

from a privately owned bank. To do this we may profitably make use again of a hypothetical example.

### *Limitations of Investment on Bank Credit*

Suppose that over the years you have put aside what you could out of your pay each week until you have accumulated \$5,000 and with this you start your own business. Let us assume it is a grocery store. You rent a shop which appeals to you, buy the necessary fixtures, fill the shelves with the hundreds of items handled by a good grocery store, and open the door for business.

Now, first, let us make one simple point. Suppose that after a few weeks or months the store and all its contents are completely destroyed by fire. If you have paid cash for fixtures and inventory—and if you have no insurance—you simply have to “pocket the loss.” The whole venture in this case just goes down as an unfortunate experience. You have lost some or all of your savings, which may be most distressing from your point of view, but from the viewpoint of society the losses have been absorbed by you.

Now let us assume that your store, instead of being destroyed, immediately “catches on” and proves to be highly profitable—so profitable that you decide to open a second one, and then a third, etc. And let us assume that you carry out this expansion program more rapidly than is possible out of your profits—that is, more rapidly than is possible out of savings—and so you obtain a loan of \$20,000 from your bank. Further, let us assume that at this point, just when you have completed your expansion program, there is a sudden and drastic downturn of general business activity in your community, with the result that thousands of people become unemployed and your sales volume falls to the point where you no longer can meet your bills and, in consequence, you are forced into bankruptcy. Finally, let us assume that when you liquidate all your inventories, sell your fixtures, and add all your personal savings, you still are \$10,000 short of having enough to pay off the bank loan. In other words, your assets prove to be \$10,000 less than enough to absorb the losses which you have incurred by this venture. The question is: What

*When an investment made out of one's own savings is lost, the social impact is not serious.*

*If an investment made from a bank loan is lost, it is absorbed by the bank's capital to the extent the loser's assets are insufficient.*

happens to this \$10,000 of losses? Who absorbs it? For, bear in mind, every loss has to be absorbed by someone. There can be no such thing as an unabsorbed loss in society.

Now obviously in this case this \$10,000 loss falls on your bank. That is, the loss is absorbed out of the bank's "capital," which means that the bank stockholders suffer a \$10,000 reduction in their assets. And that, it should be noted, is just the reason why we require our banks to have capital. Such capital provides a buffer, or a reservoir of accumulated savings, out of which to absorb losses resulting from the loan and investment activities of the institution, and the managers of the bank recognize that, if there are losses, they will have to be made up out of their capital funds.

But suppose, at the same time you are unable to pay your loan to the bank, there are scores or hundreds of other borrowers who also are unable to pay and in the aggregate the loss exceeds the capital of the bank. Let us be specific and say that it has a capital (or net assets over and above all its liabilities) of \$500,000 and the losses aggregate \$1,500,000. The stockholders of the bank in this instance, out of its net assets, can absorb \$500,000 of the loss, but what happens to the remaining \$1,000,000? Clearly it must be absorbed by the bank's creditors. Who are these creditors? They are the depositors. These depositors, then, have their claims written down by the amount of \$1,000,000. If they had deposit claims totaling \$5,000,000 they will now find their claims are worth only \$4,000,000. That is, they get only 80 cents on the dollar, and because of the bank failure even this may be "frozen," or unavailable, for several months. But suppose some of these depositors are in such a financial position—are so heavily committed—that this shrinkage in their available assets or working capital forces them into bankruptcy. In other words, they are not able to absorb their proportionate share of this \$1,000,000 loss. What happens then? Obviously just more of the same process; it is passed on to their creditors, and if these creditors are not able to absorb it, they in turn go bankrupt and pass it on to their creditors, and so on until the loss reaches someone who does have sufficient savings available to absorb it.

*That is the reason why banks are required to have a reasonable amount of capital.*

*But if more such losses occur than the bank's capital can absorb, then the excess must be absorbed by the bank's creditors—its depositors.*

*If this forces any of them into bankruptcy, then the losses are passed on to their creditors, until losses reach those who do have sufficient assets to absorb them.*



*Difference between Bank and Business Credit*

***Could not similar repercussions occur in businesses which buy and sell on credit, without bank loans, if one fails?***

***Sales of goods on credit do not create "purchasing power" and represent merely the lending of goods, and no pyramiding of credit.***

***But commercial banks may lend up to several times their own assets, as is their primary function, and***

Such are the potential repercussions of using bank credit rather than accumulated savings for investment. But, it may be asked, is it not possible to have the same kind of repercussions without the use of any bank credit whatever? Suppose, as is quite common, a business firm buys its goods on credit from another firm, which in turn buys on credit from a third firm, and this third firm from a fourth, etc., and then the first firm goes bankrupt. Is it not possible that the resulting losses will have to be passed back through one creditor after another and cause bankruptcies at each step, just as we have seen in the case of bank credit? At first glance it certainly appears so. If we follow through the analysis, however, we shall find two significant differences.

In the first place, an ordinary business firm customarily cannot, and does not, lend—or sell on credit—something which it does not have. That is, a manufacturer, or wholesaler, or any other producer or distributor cannot create "purchasing power." They can sell goods on credit, even goods for which they have not paid, and much of our business is carried on in this way; but ordinarily they do not and cannot go beyond this and extend credit in a form which someone else can use to purchase goods or services from some third party. In other words, such business firms lend goods—which means there is a dollar's worth of goods, or a dollar's worth of accumulated savings, back of every dollar of such credit that is extended. It is true that in the event of forced liquidation, or even in other circumstances, the goods may not be salable for enough dollars to liquidate the debt, but the fact remains that at the time the credit is extended it is assumed that the goods are worth this much—otherwise they would not be bought.

A commercial bank, in contrast, is not so limited in its credit extension. It enjoys the unique distinction of being the only institution in society, aside from government, which is authorized to create "purchasing power." In making loans, and thereby writing up deposits which can be used for the purchase of goods and services from a third party, it is not limited, even approximately, to its own net worth. On the contrary, its primary function—

the primary reason for the existence of commercial banks—is its ability to create, and its customary practice of creating, liabilities or “purchasing power” to the extent of several times its net asset position. In consequence, in the case of bank credit there may not be that immediate ability to absorb so large a percentage of losses in the total credit granted as there is in the case of credit extended by one business firm to another. The difference, it may be granted, is one of degree, but in practice it is of importance.

The second significant difference between bank credit and business credit is even more subtle. A business firm, when it extends credit, is in effect lending its own assets; a bank, by contrast, to the extent that its loans exceed its net worth, is in effect lending the assets of someone else, namely its depositors. A business firm before it sells goods on credit appraises the position of the potential buyer and arrives at a judgment whether it is a risk which it cares to take. Likewise a firm which has sold to the one now considering whether it will sell to someone else has in turn appraised the credit position of that firm, including its accounts receivable. And so it goes up and down through the whole business structure. If a loss occurs, therefore, it properly may be put down as the result of bad judgment. This may not save the firm from bankruptcy, but at least the loss is something which presumably was regarded as a possibility.

In the case of a bank the situation is quite different. To the extent loans exceed the bank's net worth, it is in effect lending the assets of those—the depositors—who are never in a position to appraise the risks they are taking. The depositors understand, of course, that the funds they leave with their bank will be lent out or “invested” by the bank. But this is vastly different from their recognizing that by this process they are put in a position where actually they are taking a significant business risk—that in effect they are putting their money into this or that business venture, the name of which they do not even know, and never will be able to find out unless the bank fails and the depositors are called upon to absorb a part of the loss. The point is, in other words, that a bank depositor ordi-

*so their ability to absorb losses in proportion to credit granted is less than that of business firms in relation to one another.*

*Moreover a bank lends to a large extent other people's assets; a business firm, its own.*

*A bank's depositors are not conscious of risks taken with their deposits—since they may ordinarily depend on the banking system to assure safety of deposits.*

*A business firm must closely supervise the credit it extends, as an important phase of its regular business.*

narly does not assume that he is taking an appreciable risk when he leaves his funds at a bank. On the contrary he assumes that his funds are safe and will be available to him on demand whenever he wants them.

The business firm, in contrast, is ever conscious of the credit it has extended and of the fact that the advance may not be repaid when it is due. It closely supervises the total outstanding at any time, sets up reserves against possible losses, and constantly attempts to protect itself against unfavorable developments. In consequence, only in case the business firm underestimates the potentialities is it caught unprepared.

The bank depositor, on the other hand, is never prepared, for all practical purposes, for the eventuality of having his working capital "frozen" and of receiving less than 100 cents on the dollar. If he is subjected to such a reduction of his available working capital, it may set in force a chain of far-reaching consequence.

To summarize, then, the two basic differences between bank credit and credit extended by an ordinary business firm are, (1) that bank credit can be, and customarily is, extended in a volume several times the net worth of the bank, whereas the business firm ordinarily does not have this ability to create "purchasing power" and hence lends nothing but actual savings; (2) that bank credit may result in losses for those who are quite unprepared for their impact, whereas a business firm always is conscious of the risks its extensions of credit involve and in consequence is, within the limits of its ability, prepared to absorb them.

Such conclusions do not mean that bank credit should not be used. Nor do they mean that there will be a larger proportion of unsuccessful ventures financed with bank credit than financed out of accumulated savings. But they do mean that when we use bank credit we subject the economy to a greater potential danger of widespread repercussions than when we use accumulated savings.

In general, in other words, we may say that when we use accumulated savings we thereby assure having immediately available the means for absorbing any loss that may be involved; when we use bank credit and a loss results,

*Ventures on bank credit therefore involve the economy in greater potential danger than do ventures financed out of savings.*



we may have to call upon savings which in effect have not been set aside to absorb such losses. The result is that, in the first instance, when there is a loss it can be absorbed and that is the end of the matter; in the case of bank credit, if the loss exceeds the net worth of the bank, the loss has to be passed on to the depositors, which may mean just the beginning of trouble.

### *Proposals for Federal Capital Banks*

Acceptance of the principle that commercial banks ought not to furnish venture capital, does not, however, prove that such financing is not the correct function of banks of a different type. Indeed, at present, the notion that it is necessary to abstain from consumption and go through the unpleasant process of saving in order to secure new capital for enterprise is widely believed to be outmoded and fallacious. Proponents of this view point to the fact that during World War II the federal government has used bank funds to finance billions of dollars' worth of magnificent new factories, shipyards, etc. If this plan works in wartime, why not use it in peacetime? It was probable that numerous business concerns would appeal to the government for aid in postwar financing. Builders would want government funds to cover housing projects. Why not meet these demands by establishing federal capital banks empowered to purchase enough cumulative preferred stock to cover the large part of the cost of both new enterprises and expansions of old enterprises; provided, of course, that the concerns applying for such government financing secure from the proper federal authority approval for their projects?

The capital banks would be empowered to issue legal-tender notes in convenient denominations and to record deposits in exchange for the preferred stock of the financed corporations. Since the Federal Capital Banks would have behind them the wealth of the nation, no reserve requirements would be set up, and their ability to purchase preferred stock would be limited only by the availability of acceptable ventures. Since the preferred stock would have voting power only in case the dividends fell into arrears, any contention that this would be a

*Since commercial banks, accordingly, cannot properly finance ventures which involve much risk, it has been proposed that "Federal Capital Banks" be organized with government funds to finance new enterprises or aid expansion of old enterprises.*

*Legal-tender notes would be issued in exchange for preferred stock, without voting power unless dividends fell into arrears.*

scheme to make government dominate enterprise would be entirely unfounded. Enterprise would, in reality, be as free as ever. On its face, this plan seems to be ideal. Is it really sound?

*The officials who would approve such aid would run no risk of personal losses.*

*The rapid expansion of enterprise would outrun production; so would the supply of money.*

*Inflation would raise the capital requirements in dollars, for successive new enterprises, and thus accelerate decline of value of dollar.*

*Any banking schemes for raising capital without saving or without responsible weighing of risk are headed for inflation and disaster.*

In considering its merits, the first point to be noted is that the official or officials approving the plan would suffer no personal losses if the venture failed. Presumably, therefore, every project for which a skillful promoter having proper political support could make a convincing argument would be approved. The result would be rapid expansion in almost all fields of enterprise. But each new issue of preferred stock would mean a corresponding increase in either currency or demand deposits or both. Many of the newly financed enterprises would add little or nothing to the nation's total output of goods, for they would all be competing for a definitely limited supply of labor and natural resources. Therefore, money and demand bank deposits would increase faster than would production; in other words, inflation would be the outcome.

As inflation proceeded, the purchasing power of the dollar would shrink. To finance a given physical plant, a new enterprise would, therefore, need more dollars of capital than did its predecessor. This fact would speed up the rate of inflation, and the purchasing power of the dollar would shrink more and more. This would mean, of course, that all owners of money, bank deposits, notes, mortgages, bonds, annuities, or life-insurance policies would see the real worth of their assets fading away before their eyes.

All other plans which promise to raise capital without saving have the same weakness as the one outlined above—they all result in inflation. In other words, they do not really conjure up capital from nowhere. What they really do is to compel all holders of assets expressed in terms of dollars to contribute parts of their savings to finance the new enterprise. And one may be sure that any banking scheme for capital raising which does not place the risk of loss squarely upon the bank's stockholders will result in dissipating the savings of the thrifty by diverting labor and material resources to an endless variety of inefficient and relatively unproductive undertakings. The hope that per-

manent business capital can be accumulated by any other process than saving it dollar by dollar remains, therefore, nothing more than a fantasy.

### *Government Guarantee of Private or Bank Credit*

An alternative method of supplying capital to industry and commerce, where in the judgment of the commercial bankers the risk is too great for a commercial bank to assume in full, is to divide the risk and thus reduce it to a size the bank feels it dare undertake. The application of this principle of insurance, namely, the reduction of risk by scatterment and diversification, takes various forms, and is a rapidly expanding phenomenon of American finance.

Sometimes it is merely a cooperative mutual guarantee, as in the case of FHA Title II home loans, where premiums are paid into a common guarantee fund which is assumed to be adequate to recompense any holder of an insured mortgage loan against loss through default of the mortgagor.

A second device is for the Federal Reserve Bank to underwrite say 90 per cent of the loss sustained by a member bank on any loan originated by the member and guaranteed by the Reserve Bank; or else for the Reserve Bank to participate up to say 90 per cent in the loan, the member bank making the remaining part of the loan on its own account. Similarly, the RFC, the Maritime Commission, or other government agency may guarantee loans originated by member banks. The guarantee fund may be supplied by the Treasury direct, in advance, or the Treasury may merely underwrite the Reserve Banks, RFC, or other agency against ultimate loss. In FHA Title I loans the individual member banks were originally directly guaranteed against loss and no premiums were paid by them to the guarantor.

There is no objection to lenders' (investors), whether they be individuals or banks, establishing and operating a mutual insurance system, whereby the loss on particular loans is insured in whole or part. The principle of insurance is quite universally approved, and there is a tendency to extend it to an ever-widening list of risks as they are

*Alternative plans include government insurance of bankers' loans, either in a co-operative guarantee or by underwriting of any loss by a government agency.*



*There are serious objections to commercial banks' reliance on government guarantees of loans.*

*It would tax the vitality and change the psychology of bankers as to risk taking.*

*It would stimulate the nationalization of banking and endanger the continuance of private enterprise.*

deemed insurable. Nor can there be objection to commercial banks' insuring loans through an insurance company specially devised for the purpose, instead of handling it on a mutual basis.

There are however, serious reasons why the commercial banks should not rely upon government guarantee of loans, whether done directly by the Treasury or through some government agency such as the RFC or federal reserve banks. Such reliance of banks upon government guarantee creates a relation of dependence that is bound to sap the vitality of bankers in analyzing and determining the desirability of loans, in seeking loans and cooperating with private industry, and in taking the risks which lenders should normally take. The psychology of bankers would tend to become supercautious, like that of trustees. The bureaucrats would become the real determiners of credit; and they are likely to be too conservative or too radical, according to the political situation of the hour. An even more important effect of the dependence of bankers upon government guarantee would be the fillip it would give toward the nationalization of banking and the socialization of losses. The continuance of private enterprise would be seriously jeopardized by this shift in financial responsibility in our country.

The bankers may well be wary of the government guarantee of loans. It is appealing to a lazy, timorous, or complaisant banker to resort to government guarantee at every opportunity. But, while he lolls in ease, his function is being stolen and his institution slowly nationalized.

We have now completed what we referred to at the beginning of this discussion as the theoretical analysis of saving and capital formation. We turn now to a brief description of the actual process by which savings are converted into capital.

## VI. THE PROCESS OF CAPITAL FORMATION

All of us have had the experience of trying to save, of trying to build up a little reserve for a rainy day. It is not an easy job, far from it. And it is equally difficult to make those savings work for us and yield an income

*Accumulation of capital is a gradual process.*

through the production of goods and services for sale. During the past 60 years we have succeeded in adding to our capital supply an average of only 4 billion dollars a year, which is equivalent to less than was spent by our national government every three weeks in 1943.

### *Limits of Capital Formation through Savings Institutions*

Why are the conversion of our savings into capital and the maintenance of that capital so difficult? Each of us can, of course, save a part of his income and by depositing it in a savings account get interest on his funds. There is nothing difficult about that. Or we can save through insurance and gradually accumulate a fund which becomes available later to either ourselves or our heirs. There is also nothing difficult about that. Yet both these operations represent capital formation—or at least the first step toward capital formation, for the institutions with which we place our savings invest them, except when they purchase government bonds, in organizations which use the funds for the production of goods and services for sale. Thus when we deposit our savings in such institutions those funds are usually converted in due time into capital.

What is difficult about such a process? Savings banks and insurance companies—sound, well-managed savings banks and insurance companies—do not fail. Savings placed with them, therefore, and through them ultimately converted into capital, are as safe as anything can be. If one deposits \$1,000 with them, that \$1,000 will be put to work earning an income and one need have no fear of losing his \$1,000. What could be simpler? And since that is, or almost inevitably leads to, capital formation, why is that not the perfect solution for always making certain that we can successfully convert our savings into capital and then maintain that capital indefinitely?

The answer to this is that, although it is true this is one means by which we convert savings into capital, the amount that can be converted in this way is relatively small, and it is only by keeping the amount small and securing for such capital a preferred position that savings banks, insurance companies, trust companies, and similar organizations maintain such a high margin of safety. To

*Investment through savings banks and insurance companies is a safe way of converting savings into capital;*

*but the amount convertible in this way is relatively small, for it is given a preferred position to most of the capital required in business and does not provide "venture capital."*

make this clear, let us look at the problem of capital formation as a whole and see in what various ways capital may be "raised."

### *The Hazards of Business Adventure*

*Going into business "on one's own," which is converting one's own savings into capital under one's own control, is the way a vast amount of capital is formed and maintained or expanded in successful enterprise—*

*but also the way a vast amount of savings is lost.*

We may well begin with the simplest possible case. Suppose that over the years you have accumulated savings of \$5,000 and you decide you want to go into business for yourself. That is, you decide that if you withdraw your \$5,000 from your savings bank and set up a little factory with it you will be better off than you now are. So you withdraw your savings, rent the necessary space, buy the machines and raw materials, and start production.

Now by this process you convert your savings into physical capital under your control; every year millions of dollars are converted into capital in this direct manner. But whether you will maintain your capital is another question. That depends upon whether your venture proves to be a success. If it does, your capital will maintain its value—perhaps increase in value; if it does not, you will find, of course, that a greater or lesser proportion of your savings has been lost.

At another place (in Chap. IX) we discuss in some detail the problems involved in starting a new business and the record of success and failure of such attempts. It is sufficient to say here, therefore, that saving a little money and going into business for one's self is no easy road to success. Tens of thousands of such ventures become insolvent every year—and each of them represents the failure of someone who converts his savings into capital to earn an income through the use of such capital. Here, then, is one means by which enormous amounts of savings are converted into capital, but also the means by which enormous amounts of savings are lost.

### *How New Capital Is Obtained for Growing Business*

But for the moment let us assume that the venture which you start with your \$5,000 of savings is successful—that your product finds a ready market at a "good" price, and you realize that if you could expand production you



would make larger profits. What are the sources open to you for getting the needed capital for this expansion?

In general there are only two sources available. The first and most "conservative" is to use your own profits; that is, to reinvest your profits as you go along. This is commonly known as "plowing back earnings." It is a method of increasing capital which almost always is used to some extent by every company, and in small concerns just getting started it may be the only practical method available. The amount so reinvested in ordinary years aggregates hundreds of millions of dollars. It is one of the most significant sources of capital; that is, one of the most important methods of capital formation.

The second source of capital available to you is the savings of other people. How may they be tapped? There are two ways. You may simply find someone, or a group, who is willing to join with you and thus come in as part owners, either as partners or as fellow stockholders. Or you may, if your business is incorporated, work through investment banking houses and the capital market; that is, you may offer an issue of stock or bonds for purchase by the general public.

Now what, in practice, are you likely to do? Well, at first, you almost certainly will have to carry the whole load yourself. You start with your own \$5,000 and, until the venture proves itself, will probably have to rely upon your company's earnings as a source of additional capital. You may be able during this period to get "help" from your commercial bank; in fact if your earnings and general credit position are favorable you can be certain of it. But such loans from your bank are not "permanent capital." They are mere loans of relatively short duration which you will have to pay back. They may, of course, be of enormous aid to you, and enable you to increase your profits substantially, but they differ fundamentally from the savings you have invested in the venture. On the whole, therefore, it is accurate to say that in the early days of your venture you will probably have to rely upon your own savings and the plowing back of earnings.

Then as you grow and the success of your venture becomes established you may do any one of various things.

*Expansion through plowing back earnings is one of the most important ways of capital formation.*

*Another source of capital for expansion is other people's savings.*

*One may get temporary loans from commercial banks, if situation of business is favorable, but these do not constitute real additions to capital.*

*Permanent addition of capital from outside may be secured by personal negotiation, with or without incorporation.*

*But large businesses may use the general capital market.*

*There investment bankers act as advisers and intermediaries.*

You may approach other individuals who have savings and ask them to participate. These other individuals may be your friends; in this case it may be satisfactory to all concerned for them to come in as partners. Or they may be individuals who more or less make a business of "putting money" into promising ventures; in this case you will almost certainly find it necessary, and desirable, to incorporate. There are many reasons for incorporation in such circumstances. It establishes limits of risk and responsibility and, what is even more important, it creates an evidence of ownership—the stock certificate—which may be sold without necessarily disrupting the organization.

Now these methods, namely using your own savings, "plowing back earnings," and through direct negotiation getting others to invest their savings, in the vast majority of cases have to provide whatever capital a business needs until it attains a net worth of several hundred thousand dollars; and in many organizations with millions of dollars of capital these are the only sources that have ever been used. But let us suppose that your company continues to grow, so that you and your colleagues decide to go through the capital market for the purpose of raising funds for further expansion.

### *The Work of Investment Bankers*

To do this you normally would call in an investment banking house—an institution whose function it is to act as an intermediary between corporations or government units which desire more funds and individuals and institutions with surplus funds to invest. The investment bank would make a thorough examination of the financial condition of your company, and of its prospects, and on this basis, if its conclusions were favorable, would advise you as to the best type of securities for you to issue. Suppose it is decided that you issue \$1,000,000 of common stock—which incidentally would be a small issue to make in the capital market. The detailed terms are agreed upon between you and the investment banker. You then submit full details as to your business, and as to the proposed issue, to the Securities and Exchange Commission; for until that organization approves the statement of the issue you are

prohibited from offering the stock for purchase by the general public.

Suppose the Commission approves your registration statement. The investment banking house then, or at a specified date, pays you, or undertakes to pay you, the agreed-upon price for the stock and proceeds to the best of its ability to sell it to the investing public. In other words, the investment bank "underwrites" the issue and accepts the risk of being able to sell the stock to the public. If it is to break even, or make a profit, on the transaction, therefore, it must succeed in selling the stock at a price somewhat higher than it pays you. The amount of this "spread" necessarily varies widely from one issue to another, depending upon how well the issuing company is known to the investing public, how difficult it will probably be to sell the issue, or, in brief, how much risk the handling of the issue involves.

Or suppose it is decided that instead of issuing common stock you should issue bonds. The same procedure is followed insofar as your arrangement with the investment banker and submission of details to the Security and Exchange Commission are concerned. But there is one great difference between the two issues from your point of view. In the case of a common stock issue the effect is to increase the number of owners of your company, and thereby reduce your proportion of control—the reduction being by the proportion which the new issue is of the total number of shares outstanding after the issue is sold. In the case of a bond issue, by contrast, there is no such spreading of ownership. The purchaser of a bond does not become a part owner of a concern. He is a creditor and, as such, has a preferred position in regard to the earnings of the company and also in regard to getting his money back in case the company has to be liquidated.

Now how valuable this preferred creditor position is in practice depends, of course, primarily upon how much equity capital—or capital represented by stock—there is in the concern and how large its profits are. That is, the smaller the bonded indebtedness of a company in relation to its equity capital, and the larger the company's profits in relation to its fixed charges, the safer are the bonds. It

*An investment banker underwrites an issue of new shares or bonds, and sells it to investors.*

*If the issue is of common stock, it spreads ownership of the company; if bonds, it creates debt without spreading ownership.*

*The safety of bonds depends largely upon how much capital has been provided by stockhold-*



*ers or plowed back, and upon the company's earnings in proportion to fixed charges; if thus well protected, bonds are proper investment for institutions.*

*Security markets make adjustments of holdings easy, according to changing conditions and opportunities for reducing risk or increasing yield.*

*Thus they make available a large supply of savings for use as capital.*

*Our economic well-being and progress requires continuous conversion of savings into capital.*

is for this reason that we permit our savings banks and insurance companies to buy certain bonds when adequately protected in these ways, but prohibit their purchase of common stock. The formation of capital through our savings banks, insurance companies, and similar institutions, therefore, to return to the point with which we started this section, cannot go beyond a certain point in relation to the capital structure of the economy as a whole. They merely take the cream of the risks, and the only way this cream can possibly be created is by having others, the stockholders, provide the equity which serves as a buffer against losses to the bondholders.

This is not to say, of course, that every bond is safe—that bonds necessarily offer a secure means for converting savings into capital—or that any bond is safer than any common stock. Millions of dollars have been lost in bonds—bonds which at the time of issue appeared perfectly safe. This has been inevitable; for in raising capital for a business enterprise there is always a risk, and the problem is to follow that course which appears best, all things considered, to fit the particular situation. That is why we have so many different kinds of bonds, and why we have preferred stock—which as to risk and earnings stands between bonds and common stock. It also is the reason why we need security markets; for when there are such markets it is possible for an investor constantly to adjust his holdings to the amount and degree of risk he is willing to assume. Thus they make available a much larger supply of savings for use as capital than if such adjustment were not possible, or were possible only at considerable trouble and sacrifice.

### *Importance of Continuous Capital Formation*

How important is it to society, and to us as individuals, to encourage owners of savings constantly to convert their surplus funds into capital? This is an easy question to answer. Our very livelihood depends upon this continuous conversion. It has been this process, as stated at the beginning of this discussion, which has made possible the increased productivity that is responsible for our material and cultural and political progress.

It is a matter of the utmost concern to all of us, therefore, when anything is done which makes those who have savings unwilling to convert them into capital. Such conversion, as we have said, is fraught with difficulties under the best of circumstances. And even when one is successful in the first instance his troubles are far from over. Billions of dollars of capital are used up every year and billions more become worthless through obsolescence or are lost. It requires constant effort, therefore, even to keep our existing supply of capital intact; and it requires endless determination, ambition, and energy to add to our capital supply.

Our people have been more successful than those of any other nation in converting their savings into capital. This has not been just because we had a greater reservoir of natural resources with which to work. Nor has it been merely because our climate was more suitable for progress. And it has not been because our people inherently have been more capable than the citizens of other nations. It has been, as well, because we have had a political and economic system which was conducive to, and encouraged, the taking of risks—because it has been possible to improve one's position, to attain relative security for oneself and one's family, to carve out a destiny which would serve as a goal to which others would strive.

For the future of our nation and for the benefit of our children we must protect and encourage this willingness to take risks—this constant effort on the part of our people to convert savings into capital. We must protect and encourage it because if this willingness is destroyed the forward progress of our nation will come to a halt. Only by investment—only by the successful conversion of savings into capital—can we obtain the additional production which is essential to the attainment of our material, cultural, political, and spiritual goals.

#### SUMMARY

We may summarize the main points we have made as follows:

1. Savings from the social point of view consist only

*Even to maintain our existing supply of capital requires much effort; to keep it growing requires still more effort.*

*Our success in converting savings into capital has been due in large part to our political-economic system, which encourages risk taking and individual enterprise.*

*Otherwise our progress would slow up. Successful conversion of savings into capital is essential to attainment of all our national goals.*

*Summary:*

1. *Our sav-*

*ings as a nation consist only of marketable goods.*

*2. They may be consumed, hoarded, or invested.*

*3. Capital is savings used for production.*

*4. Banks create only claims usable in creating capital.*

*5. Investment is conversion of savings into capital.*

*6. Savings always tend to exceed investment.*

*7. Banks may reduce excess by anticipating saving.*

*8. The proper relation between saving and investment is not statistically analyzable.*

of marketable goods, and the total volume of savings is the total volume of such goods. Individuals may have savings in the form of marketable goods or claims against such goods, but when we consider society as a whole (that is, when we attempt to determine whether, and to what extent, society as a whole is increasing or decreasing its savings) it is only the goods themselves that count.

2. Such savings may be either privately or publicly owned and may be used for consumption purposes, or may be hoarded, or may be used for furthering the production of goods and services for sale.

3. Capital includes all the goods used for this latter purpose; that is, capital is savings which are used for furthering the production of goods and services for sale.

4. Since capital consists of savings, it follows that banks, in the exercise of their normal lending functions, cannot create capital. Banks can, however, create claims which can be used to facilitate the creation of capital.

5. Investing is the process of converting savings into capital. It differs from hoarding in that investing is an attempt to use savings in a manner which will yield a monetary return, whereas hoarding is an attempt to protect or save the wealth one already has at the sacrifice of immediate income.

6. Saving is thus never equal to investing, unless by accident. Of total savings at any given time, a substantial portion is held in the form of consumption goods, and some may also be held in the form of hoards. To the extent of these two amounts, therefore, savings always tend to exceed investment.

7. On the other side, banks, through their loan and investment operations, in effect make possible investing which precedes saving. This process tends, therefore, to reduce the amount by which savings exceed investment.

8. What the proper relation is at any given time between saving and investing is not a problem which lends itself to statistical analysis. It rests upon the decisions of the public as to the proportion of their savings they prefer to devote to consumption as compared to investment, and, as these desires change, so will the relation between savings and investment change.



9. When these changes in public attitude toward the use of their savings are small and gradual, the economic system can adjust itself to them without widespread difficulty. When the changes are sudden and major, however, such adjustment may involve widespread upheavals in the economy.

10. It is unwise public policy, therefore, to attempt to counteract changes in the public attitude toward the use of savings either by government spending or, for example, by taxation designed to take away the hoarded funds in order to reinject them into the economy at some other point. Such policies tend to aggravate the trouble. The wise public policy is to remove, insofar as possible, those conditions which have led to the change in the public attitude. In other words, if there is hoarding, the proper policy is not to try to counteract it by government spending but to remove the causes of it.

11. Granting wise public policy, we need have no fear of the extent to which saving exceeds investing. The danger is rather the other way around. Banks, because of their ability to create claims in a volume several times as large as their net assets, make it possible, in effect, as stated above, for investing to precede saving. This ability is of great benefit to society, but it also involves a potential danger of the first magnitude for the economy as a whole. If such investing results in losses exceeding the net assets of a bank, there may not be directly and immediately available the savings out of which to absorb the loss, as there are when saving precedes investing. A multiplication of such losses brings widespread disaster.

12. Conversion of savings into capital and the conservation of such capital over the years in a form which will yield an income is a task of utmost difficulty. The welfare of our nation and of us as individuals, however, depends upon the successful performance of this task. In consequence, any public policy which discourages the willingness of those who have savings to invest them is a direct handicap to our future development. For the welfare of our nation and for the benefit of us and our children, we must protect and encourage the willingness to take risks—must protect and encourage the willingness of those who have savings to use them for capital purposes.

*9. Sudden or major changes in this ratio may seriously disturb the economy.*

*10. Use of government spending or taxation to counteract such changes aggravates the disturbance, whose causes ought rather to be removed.*

*11. Variations in excess of saving over investing are less to be feared than extraordinary increase in investment that precedes saving.*

*12. Public policies should be directed toward continued protection and encouragement of use of savings for capital purposes.*

## APPENDIX

In this chapter, a clear distinction has been made throughout between savings from the individual point of view and savings from the point of view of society as a whole. In considering savings of society as a whole, it has been pointed out that one must make a sharp distinction between actual, usable goods and money or credit instruments which are based on these goods. Further, a distinction was made between different types of real savings, defined as usable goods. The term "capital" was applied to "that portion of past production which we use for further production of goods and services for sale as contrasted with that portion we have consumed or are in the process of consuming." It is the increase in capital goods with which the chapter has been most concerned.

The statistics in this Appendix are taken chiefly from two sources: the studies of Dr. Simon Kuznets of the National Bureau of Economic Research and those of Mr. George Terborgh of the Machinery and Allied Products Institute.

Dr. Kuznets has defined capital formation as follows:<sup>1</sup>

*Capital formation*, as defined and measured here, comprises four items: (1) value of producers' durable equipment reaching the business and public enterprises that use it, at cost to the users; (2) value, at cost, of all new construction including major repairs and alterations—residential, commercial, industrial, public utility, semi-public, public; (3) net additions to stocks of commodities held as inventories by business enterprises; (4) changes in net claims by individuals, firms, and public units in this country against individuals, firms, and public units in other countries. So defined, capital formation measures the part of the current national product that is diverted from immediate consumption into additions to the real capital of business and public enterprises. It thus accounts also for a major share of the current increment to the country's total wealth. But it does omit some additions to tangible wealth, such as increases in commodity stocks of non-business enterprises and households; all investment in human capital, *i.e.*, in the increase in the productive capacity of individuals who comprise the nation; all additions to values of intangible assets, even though attained by outlay of real costs, such as increases in goodwill or trademark value resulting from advertising; all purely pecuniary appreciation in the value of assets; and all additions that result not from the current process of production but from favorable turns of incalculable providence, such as sudden finds of oil in excess of cost of discovery.

Although this definition includes "a major share of the current increment to the country's total wealth," many forms of intangible wealth are omitted. Although Dr. Kuznets includes certain types of wealth besides "capital," in the narrow sense, the different components are usually separated so as to measure the increase in capital goods, as distinct from other forms of wealth.

Estimates of capital formation must be used with discrimination, for, because of the nature of the statistical data available and because of different concepts of national income, they are bound to be rough. Kuznets has acknowledged the limitations of his estimate as follows:<sup>2</sup>

To measure capital formation, even so narrowly defined, is a task difficult largely

<sup>1</sup> University of Pennsylvania Bicentennial Conference, *Capital Formation, 1879-1938*, Simon Kuznets, p. 53

<sup>2</sup> Kuznets, *op. cit.*, p. 54.

because of lack of relevant data. The measures for the six decades, 1879–1938, presented below, have been obtained by the exercise of statistical discretion, or perhaps indiscretion; and are tentative, especially for the years before 1919. But the recent studies of the National Bureau of Economic Research do provide a core of relatively tested measures to serve as a foundation upon which, with the help of bold assumptions, serviceable estimates can be constructed. The importance of capital formation as a fundamental process in the functioning of a capitalist economy and the usefulness of a broad view of the past as a basis of judging current changes and problems appear to justify the derivation and presentation of even tentative measures.

## CAPITAL FORMATION BY DECADES

Capital formation during the period 1879–1938 is shown in Tables 1, 2, and 3. (All figures in these three tables are adjusted for changes in prices and are given in terms of 1929 prices.) These have been compiled by Dr. Simon Kuznets. In his study of capital formation, Kuznets divides the Gross National Product (which conforms roughly with national income) into two main components: consumers' outlay and gross capital formation.

Table 1 gives the Gross National Product for each decade in the period 1879–1938. For the entire 60-year period, the Gross National Product totaled 2,857.7 billion dollars. During the same period, consumers' outlay totaled 2,301.6 billion dollars, while the gross capital formation was 556.2 billion dollars. For the whole period, consumers' outlay represented 80.5 per cent of Gross National Product and gross capital formation represented 19.5 per cent. These ratios were remarkably constant throughout a 40-year period from 1879 to 1918. However, since 1918, the percentage of Gross National Product which goes into gross capital formation has declined slightly. In the period 1909–1918, gross capital formation absorbed 22.8 per cent of Gross National Product. In the decade 1918–1928, it absorbed 19.6 per cent; and in the period 1929–1938, a depressed period, it absorbed only 13.5 per cent.

Throughout this 60-year period, we "used up" a total of 322,700 million dollars' worth of capital. This represents the consumption of producers' durable goods and construc-

TABLE 1.—CAPITAL FORMATION<sup>1</sup> AS PART OF NATIONAL PRODUCT, BY DECADES IN 1929 PRICES  
(Amounts in billions of dollars)

Decade	Gross National Product	Consumers' outlay		Gross capital formation	
		Amount	Per cent	Amount	Per cent
1879–1888	173.1	134.1	77.5	39.0	22.5
1889–1898	241.5	180.5	74.7	61.1	25.3
1899–1908	365.0	282.9	77.5	82.1	22.5
1909–1918	507.8	392.2	77.2	115.7	22.8
1919–1928	767.0	616.9	80.4	150.1	19.6
1929–1938	803.3	695.0	86.5	108.3	13.5
Total . . . . .	2,857.7	2,301.6	80.5	556.2	19.5

<sup>1</sup> Capital formation is "that part of the current product which withheld from immediate consumption represents an addition to the country's stock of wealth (p. 68)."

NOTE: Totals and differences do not always equal combination of the components owing to rounding off.

SOURCE: University of Pennsylvania Bicentennial Conference, *Capital Formation, 1879–1938*, by Simon Kuznets, p. 70.



tion, through wear and tear, depreciation, and obsolescence. In other words, throughout a period of 60 years, we used up on an average 5,378 million dollars' worth of capital goods a year. In Table 2 are shown the deductions from gross capital formation because of capital used up for each decade from 1879-1938. Throughout this 60-year period, the net capital formation (*i.e.*, gross capital formation less capital used up) was 233,500 million dollars or an average of 3,892 million dollars a year.

The distribution of net capital formation by decades from 1879-1938 (again in 1929 prices) is shown in Table 3. The net capital formation is divided into four main categories: (1) net producers' durable goods, (2) net construction, (3) net change in inventory, and (4) net change in claims against foreign countries. Throughout the entire 60-year period, net producers' durable goods totaled 41,200 million dollars; net construction, 134,900 million; net change in inventory, 37,400 million; and net change in claims against foreign countries, 20,000 million dollars. The decade from 1919-1928 showed the greatest net increase in producers' durable commodities, reaching a peak of 16,600 million dollars.

TABLE 2.—NET CAPITAL FORMATION, BY DECADES, 1879-1938, IN 1929 PRICES  
(In billions of dollars)

Decades	Gross capital formation	Capital "used up" <sup>1</sup>	Net capital formation
1879-1888	39.0	21.3	17.6
1889-1898	61.1	29.6	31.4
1899-1908	82.1	41.0	41.1
1909-1918	115.7	57.5	58.2
1919-1928	150.1	81.1	69.0
1929-1938	108.3	92.2	16.1
Total.....	556.2	322.7	233.5

<sup>1</sup> Consumption of producers' durable goods and construction.

SOURCE: University of Pennsylvania, Bicentennial Conference, *Capital Formation, 1879-1938*, by Simon Kuznets, p. 60.

TABLE 3.—DISTRIBUTION OF NET CAPITAL FORMATION, BY DECADES, 1879-1938, IN 1929 PRICES  
(In billions of dollars)

Decade	Net producers' durable commodities	Net <sup>1</sup> construction	Net change in inventories	Net change in claims against foreign countries	Total
1879-1888	2.8	10.2	5.3	-0.7	17.6
1889-1898	1.9	25.7	3.9	.....	31.4
1899-1908	6.1	30.1	5.9	-1.0	41.1
1909-1918	7.4	28.2	11.0	11.5	58.2
1919-1928	16.6	32.7	12.0	7.7	69.0
1929-1938	6.5	7.9	-0.7	2.4	16.1
Total.....	41.2	134.9	37.4	20.0	233.5

<sup>1</sup> Total construction minus depreciation and depletion. Construction comprises "residential, commercial, industrial, public utility, semi-public, and public construction" (p. 55).

SOURCE: University of Pennsylvania Bicentennial Conference, *Capital Formation, 1879-1938*, by Simon Kuznets, p. 64.

In the decade 1919–1928, net construction totaled 32,700 million dollars, but this figure fell to 7,900 million dollars in the decade 1929–1938. The net rise in inventories in the period 1919–1928 was 12 billion dollars, but in the following decade there was a net loss of 700 million dollars in inventories. The net change in claims against foreign countries was greatest in the decade 1909–1918, owing largely to foreign trade growing out of conditions of World War I. In that decade, the net income in claims against foreign countries was 11,500 million dollars, compared with a net loss of 1,000 million dollars in the previous decade. The change since 1909 represents the change in the creditor position of the United States brought about by conditions of World War I. The shrinkage in foreign trade after 1918 is shown in the decline in claims against foreign countries from 11,500 million to 7,700 million dollars during 1919–1928 and a further drop to 2,400 million dollars in the decade 1929–1938.

As indicated in Dr. Kuznets' definition of capital formation, his concept includes a number of types of wealth besides capital in the narrowest sense. Although the estimates do not include all forms of wealth, Kuznets has prepared Table 4 which shows, for each of the six decades, 1879–1938, the increase in "net reproducible wealth outside of households." This classification excludes "land, most other nonreproducible assets, and personal movable property within households, but takes into cognizance claims by and against foreign countries." There has been a marked increase in the main forms of wealth throughout this 60-year period. The figures given in the table indicate the amounts of "net reproducible wealth" as of Jan. 1 for each decade listed. For example, on Jan. 1, 1879, the total net reproducible wealth was 34,300 million dollars. By Jan. 1, 1939, the net reproducible wealth amounted to 267,800 million dollars (again all figures are in terms of 1929 prices). The per capita figures show that on Jan. 1, 1879, the net reproducible wealth per capita was \$707 and that on Jan. 1, 1939, it was \$2,049. The per capita wealth increased 189.8 per cent from Jan. 1, 1879, to Jan. 1, 1939.

TABLE 4.—GROWTH OF NET REPRODUCIBLE WEALTH<sup>1</sup> OUTSIDE OF HOUSEHOLDS, 1879–1939, IN 1929 PRICES

Year (January 1)	Total (in billions of dollars)	Per capita (in dollars)	Per capita 1879 = 100
1879	34.3	707	100.0
1889	51.9	850	120.2
1899	83.4	1,125	159.1
1909	124.5	1,385	195.9
1919	182.7	1,751	247.7
1929	251.7	2,086	295.0
1939	267.8	2,049	289.8

<sup>1</sup> The stock of wealth excludes all land, most other nonreproducible assets, and personal movable property within households, but takes cognizance of claims by and against foreign countries. This total designated "reproducible wealth outside of households" comprises "the equity of residents of this country in domestic stock of productive equipment, in all domestic real estate (excluding land), in all commodities, livestock, and precious metals held by business and other firms within the country and in all assets outside of this country" (p. 66). The data for "reproducible wealth outside of households" were built up by approximating such wealth as of Jan. 1, 1879, as 34.3 billion dollars, and to that datum net capital formation (see Table 2) for each decade has been added.

SOURCE: University of Pennsylvania Bicentennial Conference, *Capital Formation, 1879–1938*, by Simon Kuznets, p. 67.

TABLE 5.—ESTIMATES FOR CAPITAL FORMATION  
(In millions of dollars)

Year	Private Capital Formation						Public plant		
	Private producers' durable goods			(4) Housing <sup>2</sup> construction <sup>5</sup>	(5) Total columns (3) + (4)	(6) Buildings for <sup>5</sup> nonprofit institutions		(7) Total including nonprofit institutions (5) + (6)	Housing construction plus build- ing for <sup>5</sup> nonprofit institutions
	(1) Plant	(2) Equipment	(3) Total						
1919	3,166	3,929 <sup>1</sup>	7,095	1,785	8,880	185	9,065	1,970	912 <sup>3</sup>
1920	3,738	4,589 <sup>1</sup>	8,327	1,712	10,039	236	10,275	1,948	1,212 <sup>3</sup>
1921	2,475	2,758 <sup>1</sup>	5,233	2,016	7,249	297	7,546	2,313	1,525 <sup>3</sup>
1922	2,644	3,140	5,784	3,414	9,198	387	9,585	3,801	1,657 <sup>3</sup>
1923	3,280	4,622	7,902	4,395	12,297	426	12,723	4,821	1,598
1924	3,307	4,343	7,650	4,772	12,422	457	12,879	5,229	1,862
1925	3,591	4,598	8,189	5,141	13,330	609	13,939	5,750	2,108
1926	4,185	4,941	9,126	4,848	13,969	692	14,661	5,535	2,113
1927	4,133	4,644	8,777	4,645	13,422	712	14,134	5,357	2,368
1928	4,103	4,743	8,846	4,355	13,201	664	13,865	5,019	2,462
1929	4,562	5,595	10,157	3,193	13,350	568	13,918	3,761	2,411
1930	3,768	4,572	8,340	1,824	10,164	467	10,631	2,291	2,777
1931	2,182	2,941	5,123	1,379	6,502	356	6,858 <sup>1</sup>	1,735	2,577
1932	1,192	1,607	2,799	515	3,314	194	3,508	709	1,794
1933	867	1,504	2,371	373	2,744	85	2,829	458	1,330 <sup>4</sup>
1934	1,129	2,307	3,436	419	3,855	102	3,957	521	2,037 <sup>4</sup>
1935	1,258	3,091	4,349	813	5,162	100	5,262	913	1,834 <sup>4</sup>
1936	1,650	4,133	5,783	1,374	7,157	162	7,319	1,536	3,284 <sup>4</sup>
1937	2,294	5,276	7,570	1,740	9,310	168	9,478	1,908	2,789 <sup>4</sup>
1938	1,776	3,613	5,389	1,618	7,007	199	7,206	1,817	3,359 <sup>4</sup>
1939	1,851	4,284	6,135	2,060	8,195	210	8,405	2,270	3,832 <sup>4</sup>

<sup>1</sup> Excludes ships built for the Emergency Fleet Corporation. <sup>2</sup> Excludes nonprofit institutions. <sup>3</sup> Excludes special wartime military construction. <sup>4</sup> Includes work-relief construction. <sup>5</sup> Consumers' goods.

NOTE: This table shows estimated expenditures for all durable goods, producers' and consumers'. Data related to expenditures "which under business accounting practices are properly chargeable to capital account." Housing construction made up of nonfarm housing including estimates for major alterations, additions, and repairs requiring a building permit, and farm housing. The nonprofit institutions estimates are those covering religious, memorial, educational, social, and other construction privately financed.

SOURCE: Estimates of George Terborgh, *Federal Reserve Bulletin*, September 1939; February 1940.



TABLE 6.—GROSS SAVINGS BY ALL NET-INCOME AND NO-NET-INCOME NONFINANCIAL CORPORATIONS, 1923-1939  
(In millions of dollars)

Year	Depreciation and depletion														
	All nonfinancial corporations					Nonfinancial corporations with net income					Nonfinancial corporations with no net income				
	Undis-tributed profits <sup>1</sup>	Depre-ciation	Deple-tion	Total	Gross savings <sup>2</sup>	Undis-tributed profits <sup>1</sup>	Depre-ciation	Deple-tion	Total	Gross savings <sup>2</sup>	Undis-tributed profits <sup>1</sup>	Depre-ciation	Deple-tion	Total	Gross savings <sup>2</sup>
1923	2,282	2,969	...	2,969	5,251	3,991	2,194	...	2,194	6,185	-1,709	775	...	775	-934
1924	1,208	3,004	...	3,004	4,212	3,086	2,238	...	2,238	5,324	-1,876	766	...	766	-1,110
1925	2,244	2,669	460	3,129	5,373	3,886	2,220	366	2,586	6,472	-1,641	447	94	541	-1,100
1926	1,855	3,025	564	3,589	5,444	3,635	2,489	459	2,948	6,583	-1,780	536	104	640	-1,140
1927	496	3,110	497	3,607	4,103	2,692	2,334	296	2,630	5,322	-2,198	776	200	976	-1,222
1928	1,548	3,319	507	3,826	5,374	3,548	2,667	396	3,063	6,611	-2,000	652	112	764	-1,236
1929	1,759	3,564	553	4,117	5,876	3,823	2,936	463	3,399	7,222	-2,065	628	90	718	-1,347
1930	-3,466	3,650	459	4,109	643	379	2,437	241	2,678	3,057	-3,846	1,212	217	1,429	-2,417
1931	-5,546	3,652	265	3,917	-1,629	144	1,613	77	1,690	1,834	-5,689	2,039	188	2,227	-3,462
1932	-6,096	3,393	245	3,638	-2,458	-71	1,143	83	1,226	1,155	-6,025	2,250	162	2,412	-3,613
1933	-2,799	3,205	244	3,449	650	582	1,492	84	1,576	2,158	-3,380	1,713	161	1,874	-1,506
1934	-1,855	3,040	309	3,349	1,494	648	1,647	151	1,798	2,446	-2,503	1,393	158	1,551	-952
1935	-1,405	3,034	346	3,380	1,975	910	1,821	178	1,999	2,909	-2,316	1,212	169	1,381	-935
1936	-710	3,014	434	3,448	2,738	777	2,217	330	2,545	3,324	-1,487	797	103	900	-587
1937	-762	3,078	521	3,599	2,837	827	2,323	412	2,735	3,562	-1,589	756	109	865	-724
1938	-1,486	2,949	415	3,364	1,878	709	1,892	246	2,138	2,847	-2,194	1,057	169	1,226	-968
1939	425	3,042	415	3,457	3,882	1,780	2,323	282	2,605	4,385	-1,355	719	133	852	-503

<sup>1</sup> Compiled net profit, minus cash dividends paid and income and excess-profits taxes.

<sup>2</sup> Undistributed profits plus depreciation and depletion. Does not include gains or losses from sale of capital assets.

SOURCE: *Statistics of Income*. The privilege of filing consolidated returns was sharply restricted in 1934, so that later figures are not precisely comparable with earlier ones. Taken from TNEC Monograph 37: *Saving, Investment, and National Income*, 1923-1937. Figures for 1938 and 1939 compiled by N.A.M.

## CAPITAL FORMATION, 1919 TO 1939

The chief forms of capital and wealth formation have been worked out annually for this period by George Terborgh and published in the *Federal Reserve Bulletins* of September 1939 and February 1940. On the basis of the classifications given in Table 5, it is possible to make a clear distinction between capital goods in the sense used in this chapter (*i.e.*, goods used for the "further production of goods and services for sale") and other forms of wealth. Capital goods are included under the heading Private Producers' Durable Goods and cover plant and equipment. The figures reveal that in the 1930s private producers' plants dropped considerably and that, although there was a decline in capital equipment, it did not compare with the decline in plant. A few figures will illustrate this.

In 1919, new investment in plant was 3,166 million dollars. In 1929, this figure totaled 4,562 million dollars. In the depths of the depression in 1933, the amount invested in plant dropped to 867 million dollars. In no year from 1933 to 1939 did the investment in new plant exceed 2,300 million dollars. New investment in equipment was 3,929 million in 1919, rising to a peak of 5,595 million in 1929. In 1933, it dropped to 1,504 million dollars—a decrease of 73 per cent since 1929. This drop, however, was not so great as that in investment in plant, which showed a decrease of 81 per cent in the same period. In 1937

TABLE 7.—PHYSICAL CAPITAL FORMATION ABSORBED BY NONFINANCIAL CORPORATIONS<sup>1</sup>  
(In millions of dollars)

Year	(1) Physical capital formation	(2) Gross savings of corporations	(3) Excess of physical capital formation over internal funds	(4) Noncurrent funds from outside
1925	6,670	5,118	1,552	1,731
1926	6,439	5,126	1,313	1,634
1927	5,601	3,752	1,849	2,031
1928	6,020	4,785	1,235	2,159
1929	7,693	5,309	2,384	2,805
1930	3,046	545	2,501	2,411
1931	50	-1,280	1,330	444
1932	- 794	-2,034	1,240	338
1933	2,794	1,008	1,786	1,304
1934	2,790	1,528	1,262	1,036
1935	3,029	1,932	1,097	1,099
1936	5,279	2,642	2,637	2,568
1937	6,688	2,759	3,929	2,795
1938	1,413	1,846	- 433	2,341
1939	4,896	3,844	1,052	1,747
1940	6,673	5,422	1,251	3,783

<sup>1</sup> Includes mining, manufacturing, commercial, and miscellaneous transportation and public utilities.

SOURCE: Compiled from more detailed table prepared by George Terborgh for the Machinery and Allied Products Institute.

however, the investment in equipment rose to 5,276 million dollars, only a little below the 1929 figure. (It should be noted that all the figures in Table 5 are in current dollars and make no allowance for change in prices.)

Housing construction is in part a capital good as defined in this chapter, and in part consumers' wealth. When a house or building is rented to tenants, it is capital in the narrow sense; when occupied by the owner it may be considered a consumer's good. Whatever classification is used, it is clear that there was a shrinkage in housing construction from 1925 to 1933. In 1925, the total value of new housing construction amounted to 5,141 million dollars. This dropped to 3,193 million in 1929 and finally to 373 million dollars in 1933. From then on, except for 1938, there was an increase, but even so in 1939 new housing construction was valued at only 2,060 million dollars.

If we include plant, equipment, and housing construction as the leading forms of non-public capital formation, it appears that the lag since has been greatest in the construction field, including industrial plants and houses. The over-all figures reveal that plant, equipment, and housing construction rose from 8,880 million dollars in 1919 to 13,350 million in 1929 and dropped to 2,744 million in 1933. In 1937, this type of capital formation totaled 9,310 million dollars but, because of the business recession, dropped to 7,007 million in 1938, rising again in 1939 to 8,195 million dollars.

The other main category of the study is public plant. This includes public-works expenditures, exclusive of wartime military construction, but including work-relief construction. These figures are worth looking at, because during the depression period the federal government attempted to compensate for the decline in private investment by a large-scale public-works program. Even from the point of view of advocates of this theory, the results are disappointing. Net expenditures on public plant increased from 912 million dollars in 1919 to 2,777 million in 1930. The figures declined to a low of 1,330 million in 1933 and rose to 3,832 million in 1939. It should be noted, however, that prior to 1930 the greater part of public works was conducted by state and local governments. The public-works program operated by the federal government from 1932 to 1940 in large part replaced public works by state and local governments, so that the net gain in this field was not so great as if state and local governments had continued their predepression expenditures for public works. Large-scale spending for federal public works throughout the 1930s did not compensate for the lag in private spending for plant, equipment, and housing.

#### EXTERNAL VS. INTERNAL FUNDS

In the TNEC hearings the assertion was made that corporations are coming more and more to pay for the capital goods they buy out of depreciation and depletion allowances and are tending therefore to rely less and less on outside sources of funds. For example, Dr. Alvin Hansen testified:<sup>1</sup>

When a society has accumulated a vast amount of capital goods, it is evident that the mere expenditure of depreciation allowances provides wide scope for continuous improvement of plant and equipment. The larger the amount of capital equipment, the larger will be the depreciation, depletion, and obsolescence allowances which are available each year for

<sup>1</sup>"Investigation of Concentration of Economic Power," Hearings before the Temporary National Economic Committee, Part 9, Savings and Investment, pp. 3538-3539.



capital outlays. Frequently, large portions of these allowances are available not merely for renewals and replacements but even for new and additional equipment. The expenditures for depreciation and depletion allowances may often have no relation to any specific worn-out machines. Newly built plant and equipment will not need to be replaced for many years and sometimes decades, yet the annual depreciation allowances on such equipment will be available year by year for expansion. Obviously, a society with large depreciation and depletion allowances can modernize and improve its capital equipment in producing continuously new techniques, and even at times expanding its plant and equipment, without tapping new savings. . . .

In 1939, the Machinery and Allied Products Institute published a study which refuted this assertion.<sup>1</sup> During revision of this study by George Terborgh, the institute's research director, he placed some of his then unpublished figures at our disposal, on the basis of which Table 7 has been compiled.<sup>2</sup> This table indicates that in 1929, the peak year prior to the depression, nonfinancial corporations absorbed for noncurrent purposes 2,805 million dollars. In 1940 such corporations absorbed 3,783 million dollars. In 1937, when national income was 7 billion dollars below the level of 1929, nonfinancial corporations absorbed, for noncurrent purposes, almost as much as they had in 1929: 2,795 million as against 2,805 million dollars. In general, then, the figures do not indicate that nonfinancial corporations are tending to absorb smaller and smaller amounts of external funds for capital purposes.

<sup>1</sup> *Savings and Investment in the American Enterprise System*, pp. 45-46.

<sup>2</sup> Terborgh's *The Bogey of Economic Maturity* (1945), to which previous reference has been made, incorporates the results of his more exhaustive research, confirming the conclusion of his earlier study.

## VIII

# MONEY AND CREDIT IN THE INDIVIDUAL ENTERPRISE SYSTEM

**M**ONEY is to the economic system what blood is to the human body. And just as one must know the circulatory system if he is to understand the functioning of the human system, so must he have a working knowledge of our money system if he is to understand the operation of our Individual Enterprise System.

This will be evident if one runs over in his mind the part that money plays in his daily life. If he reckons up his economic position or compares his present position with that of, say, a year ago, it will be in terms of money. If one works for wages, he receives his payment, except perhaps for board and lodging, in money. If one buys something at a store, he uses money to pay for it. If one makes a contract, any amounts stipulated will almost certainly be in terms of money. If one saves a part of his income, it probably will be in the form of money. And if the investment proves successful, the dividends or interest one receives will be in the form of money.

In other words, the Individual Enterprise System, and every other modern economic system, is a money economy. By this is meant simply that, for the most part, goods and services are exchanged for money and, conversely, money is exchanged for goods and services. Of course in every economy there is some exchanging of goods for goods. Farmers take eggs and butter to their local store and exchange them for other merchandise; horses or other livestock are "swapped," with or without any cash to boot"; and board and lodging not infrequently are provided as part of the pay of a farmhand or a household worker. But in the overwhelming majority of our economic transactions money is used as an intermediary; in an even larger proportion of cases it is used as a means of evaluating the goods or services involved.

*Money is the lifeblood of our enterprise system.*

*In a money economy money is the medium of exchange, and the measure of value, of goods and services.*

*The purpose of this chapter is to define money; to ex-*

*plain how it is created; to describe the functioning of money and credit; and to discuss policies of management of our money and credit system.*

We may well begin our analysis of money and credit therefore, by asking: just what is money? Once we have that clear we may properly turn to the question of how money, or more properly money and bank deposits, are created. That is logically followed by a description of the actual functioning of our money and credit system. All out of that naturally arise certain questions and problems as to the present and future management of our money and banking system; that is, types of policies which need to be followed in order to obtain the greatest possible benefit for society from the operation of our money and credit system.

### WHAT IS MONEY?

*Money has been counted sometimes as only coin of the standard metal, not including "subsidiary currency," "paper currency," or demand deposits in commercial banks.*

In the preceding paragraphs we obviously have used the term "money" in an extremely broad sense. Thus when we have said that in our economy it is customary to exchange goods and services for money, we did not distinguish among exchanges for metal money, paper money and checks drawn against bank deposits. This broad use of the term has been deliberate. To eliminate the possibility of confusion, however, it is well to note that the term is not used in this broad sense by all writers on the subject. Some writers, for example, count as money only metallic coins and paper notes. Others go still further in their refinement of terms and maintain that only the coins made of the standard metal of a country—gold in our case—properly may be designated as "money." Other coins, according to them, the metallic content of which is worth less than the value of the coins, are designated as "subsidiary currency"; paper notes, regardless of whether issued by private banks or by the government, are called "currency" or "paper currency"; and commercial bank deposits are called simply that, or perhaps "bank currency," or "deposit currency."

*We use the term here, however, to include all these; that is, what-*

For some purposes this more detailed classification unquestionably is valuable. In the following analysis, however, it is unnecessary. Accordingly, when we use the term "money" in the following pages, we mean simply "the thing with which people pay their bills." We include, thus



not only all metallic coins, but all forms of paper currency and bank deposits. To be more technical, money, as we use the term, includes all coin and paper currency outside of banks (that is, in possession of the people) plus all bank deposits subject to check.

*ever people use to pay bills.*

## THE CREATION OF MONEY

There are three money-creating agencies in the United States: (1) the U.S. Treasury, (2) the Federal Reserve System, and (3) the commercial banks.

*The money-creating agencies are the U. S. Treasury, federal reserve banks, and commercial banks.*

### 1. Money Issued by the United States Treasury

The U.S. Treasury has the power to issue any currency or coins authorized by Congress and at present is responsible for the following:

1. "Greenbacks." These are more properly known as "United States notes." They were first issued as inconvertible paper currency during the Civil War without any specific collateral back of them. They suffered considerable depreciation in the first few years following their issue, dropping in value at one time to approximately 35 cents; that is, one gold dollar was worth almost three of these notes. Following the termination of the war the Treasury began to retire the notes, and this continued until Congress passed a law prohibiting further contraction of their volume. At the time this law was passed there was about 400 million dollars outstanding and that amount was continued from then on. They were made convertible into gold on Jan. 1, 1879, and continued in this status until convertibility into gold of all currency was discontinued in 1933. Against the 400 million dollars outstanding there is, as a result of a law passed in 1900, a gold reserve of 150 million dollars.

*The Treasury still maintains "greenbacks" in circulation, about 400 million dollars.*

2. *Silver certificates.* The role of silver in our monetary system has been a stormy one and at times a major political issue. From 1791, when we adopted a national monetary system, until 1873 it was on a par with gold as monetary metal. (In 1853 free coinage of fractional silver coins was reduced.) In a new currency act in 1873 Congress did not include the privilege of free coinage of

*The Treasury issues silver certificates against silver it is required to purchase.*

*It had issued by 1946, under silver-purchase acts of 1933-1934, about 2,200 million dollars in silver certificates.*

*Gold certificates are now issued only to federal reserve banks in exchange for gold.*

*All coins now in circulation are "tokens" whose metallic content is worth less than their face value.*

silver dollars, which meant that no more could be put into circulation. Later, by the Bland-Allison Act of 1878 and the Sherman Silver Purchase Act of 1890, the Treasury was ordered to purchase a stipulated amount of silver and coin it, or issue silver certificates against it. Such purchasing was brought to an end by Congress in 1893, and from then until 1933 the Treasury did not increase its total holdings of the metal. (During World War I the government sold some of its stock to foreign countries and in 1920 this was replaced.) Then, in 1933, Congress again ordered the Treasury to begin purchasing silver and in 1934 it was authorized to continue buying the metal until either (1) there was \$1 of silver for each \$3 of gold in our metallic monetary reserve or (2) the price of silver rose to \$1.29 an ounce. (In 1932 the price was as low as 25 cents an ounce.) It was provided also in these statutes that domestic producers should be given a special premium—a price to be established by the Treasury substantially above the world market price. Under these laws the Treasury has bought over 2 billion ounces of silver. Against this it had issued, as of the beginning of 1946, approximately 2,200 million dollars in silver certificates.

3. *Gold certificates.* These, which were mere "warehouse receipts" for gold held by the Treasury, are no longer in circulation. They formerly made up a substantial part of our paper currency. They were retired from circulation in 1933 when private individuals were required to turn their gold over to the government. At present the only gold certificates in use are those issued by the Treasury to the federal reserve banks in exchange for their metal. Such certificates, as well as those formerly in general circulation, are backed dollar for dollar by gold.

4. *Coins.* All coins, of course, have to be issued by the government. Gold coins, which were called in by the government in 1933, are the only ones whose value as money is equaled by the market value of the metal in the coin. (Under a silver or bimetallic standard this is true also of silver coins.) At present we have in circulation only silver dollars, half dollars, quarters, and dimes, and nickels and one-cent pieces. In each of these the metallic content is worth less in the metals market than the face of the coin.

For the silver dollar, for example, to be worth its face value in terms of metal, silver has to be \$1.29 an ounce. That, incidentally, is the reason or basis used by the proponents of silver in referring to \$1.29 as the "statutory price" for silver.

One further point perhaps should be mentioned in connection with the government and its issuance of money. This is the question of monetary standards. All modern countries "tie" their paper currencies in one way or another to some metal. We started out in 1791 by using both gold and silver as standard; that is, we had a bimetallic standard. By this is meant that (1) there was free and unlimited coinage of both metals—anyone could take an unlimited amount of metal to the Treasury and have it coined at the statutory price; (2) both metals were unlimited legal tender; in other words they must be accepted by creditors in settlement of a debt; (3) both were issued in coins of definite weight and fineness (the gold dollar, when it was in circulation, for example, weighed 25.8 grains and was nine tenths "fine"—nine tenths pure gold and one tenth other metal, added in order to enhance its durability); (4) all government-issued paper money was freely convertible into the standard metal; and (5) there was complete freedom of export and import of the metals.

We continued this bimetallic standard until 1873, when, as indicated above, the privilege of free coinage of silver dollars was discontinued. In the meantime there had been various changes in the ratio between gold and silver and during the Civil War and until 1879 our paper currency was inconvertible. From 1879 until 1933 we were on a gold standard, which meant that the five points listed in the preceding paragraph applied only to that metal. During all this time gold was valued, or would be bought in unlimited amounts by the U.S. Treasury, at \$20.67 an ounce—a price which had been set in 1837.

In 1933 we "went off gold," and on Jan. 15, 1934, the President by executive order, on the basis of an act of Congress of that day, established a Treasury purchase price of \$35 an ounce for gold. At that time we had, according to the old value of gold, about 4,000 million dollars of the metal. By this action the value of our holding was

*We had a bimetallic standard from 1791 to 1873.*

*In 1873 free coinage of silver was discontinued, and from 1879 to 1933 we had a single gold standard, with free and unlimited coinage of gold, and paper money convertible into gold on demand.*

*In 1933 gold was withdrawn from circulation, and paper money became inconvertible.*



*The purchase price of gold offered to the Treasury was increased from \$20.67 to \$35 an ounce.*

*Gold is still used as the basis of our monetary system, and the basis of foreign exchange rates.*

*Federal reserve banks issue federal reserve notes, as our main paper money, which amounted in 1946 to 25 billion dollars.*

*At least 40 per cent must be backed by gold certificates; the rest, by "commercial paper" or government bonds.*

*Probably 90 per cent of the*

written up by some 2,700 million dollars. After that the Treasury holding continued to increase, largely through imports, until at the beginning of 1943 it amounted to over 22,000 million dollars, or approximately 80 per cent of the entire monetary gold stock of the world. Since then there has been a fairly continuous flow of the metal out of the country, but as of the middle of 1946 our holding was still in excess of 20,000 million dollars. From 1933 to the present time, we have been on an inconvertible paper standard; but, in spite of this, gold is still used as the basis of our monetary system. Our dollar is defined in terms of gold, and gold is still the basis upon which foreign exchange rates are established. It is reasonably safe to say, too, that when and if we restore convertibility of our paper currency the convertibility will be into gold, and we will adopt nearly all the other essentials noted above for the gold standard.

## 2. Money Issued by the Federal Reserve Banks

Federal reserve banks issue two kinds of paper money: federal reserve notes and federal reserve bank notes. Since the passage of the Federal Reserve Act on Dec. 13, 1913, under which the Federal Reserve System was established, there have been several modifications of the conditions under which these notes may be issued. At present it is required in the case of federal reserve notes that they shall be backed by not less than 40 per cent gold (or actually gold certificates, since the reserve banks are not permitted to own gold) and the balance, up to 100 per cent, by commercial paper or government bonds. The federal reserve bank notes may be issued against any asset held by the reserve banks up to the value of such assets. The reserve bank notes in practice have been used for the most part as an "emergency" currency and under ordinary circumstances are not issued. As of Mar. 3, 1946, there were only about 500 million dollars of them outstanding, as compared with some 25,000 million dollars of federal reserve notes.

## 3. "Deposit Currency" Created by Commercial Banks

Commercial banks are not permitted to issue paper currency, but they exert a dominant effect upon the

money supply of the nation through their loans, discounts, and investments. All told, we have something over 14,000 of such commercial banks in the United States, with demand deposits (adjusted)—which it will be recalled we classify as money—aggregating at the beginning of 1946 some 75,000 million dollars. In terms of the creation of money, therefore, these institutions are of the utmost importance. Moreover, the vast bulk of payments in the country are executed by drawing checks upon bank deposits rather than by transferring coin and currency. The exact proportion of the volume of payments executed by check is not precisely known but it has been estimated to be more than 90 per cent.

The process by which a bank creates a bank deposit is quite simple and its prosecution is an everyday occurrence. Someone who wishes to borrow money goes to his bank and explains the purpose for which he needs the funds. The bank officer, if he knows the borrower well, may "grant" the loan immediately. If the customer is not so well known or if the amount requested is large, a credit investigation of the borrower is made. If the bank decides the borrower is a "good risk," he signs a promissory note, which stipulates the amount involved, the rate of interest, and the date when repayment is to be made. This note may or may not be secured by the pledge of specific "collateral," such as a mortgage, bonds, or stock.

After the arrangements are completed, the banker writes a memorandum to his bookkeeping department wherein the bookkeeper is directed to enter a figure in two places in the bank's books. The figure is the amount of the loan.<sup>1</sup> It is entered in the loan ledger as an asset. The same figure is also added to the deposit account of the borrower. When that figure is entered in the deposit account, new money has been created. No other person's deposit or his ability to draw checks against it is thereby impaired. The new deposit is new money. The borrower can draw checks against that new deposit, and his checks will be accepted in payment of his bills just like the checks drawn

*volume of payments, however, is made by checks on bank deposits.*

*Demand deposits in 1946 amounted to 75 billion dollars.*

*When a commercial bank makes a loan, it adds the amount to the borrower's deposit account, and adds the amount of his note to its own assets, thus creating money.*

*When the borrower pays the note, that*

<sup>1</sup> For simplicity we make no distinction between loans and discounts. In the latter the interest is deducted at the time the advance is made and the borrower's account is credited with the face amount of the advance less such interest. In the case of a loan the borrower's account is credited with the full amount and the interest is paid later.

*amount of credit currency is extinguished and the return of the note (with any collateral) reduces the bank's assets also.*

*New credit money is created or destroyed likewise by the purchase or sale of bonds.*

*Government creates money for its own use through issue of securities to banks or other lenders, just as if it printed money instead.*

against any other deposit. It is true that the borrower has obligated himself to pay back the loan at some time in the future. When he does that, the bank marks his note as paid, returning it to him along with his collateral, if any has been pledged. This latter transaction represents the extinguishing of money, for the transaction results in a diminishing on the bank's books of the amount of its loans on the one side and of its deposits on the other, the reduction in both instances being the amount of the loan paid off.

The person who wanted money from the bank instead of having made a loan, might have sold the bank a bond. In this event the bank would have increased his deposit account by the amount of the purchase price and on the other side of its books it would have increased its investments instead of its loans. Thus also new money would have been created. Similarly, if the bank sold this bond to the public, then the purchasing depositor would have written a check in favor of the bank with the result that the bank's portfolio of investments and its deposits would have been reduced in the amount of the sale price. By the making of loans or by the purchase of securities for their own account, banks may increase the amount of money in the country; by the reverse transactions they may decrease the amount of money in the country. If within any period the bank's new loans made and securities purchased exceed the loans being paid off and securities sold, then the net effect is a condition of expansion in the amount of deposits; and vice versa.

If the bank's customer instead of being an individual or a corporation happens to be the government, the effect upon the amount of money is the same. If the government prints bonds and banks buy these bonds by giving a deposit credit, then the government thereby comes into possession of newly created deposits which it can use for its expenditures quite as effectively as if it had printed money in the first place. That is the process which has been going on in the United States for the past decade and is a means by which the government causes new money to come into existence. The process is far less generally comprehended by the people than the simple printing of money would be.



## *General Controls of Volume of "Bank Deposit Currency"*

How far banks should be permitted to go in this creation of money has long been a matter of public concern, and various methods of control have been tried. The generally accepted method of control in this country since about 1860 has been through required reserves. That is, banks are required to keep a reserve against their deposits of not less than a stipulated per cent. For this purpose all national banks were classified into three groups: central reserve city banks, which included only those in New York and Chicago; reserve city banks, which included those in approximately the 60 next largest cities; and country banks, which included all the others. Previous to the Federal Reserve Act this reserve had to be in gold or other lawful money, except that country banks were permitted to carry three fifths of their reserves as a deposit in either reserve or central reserve city banks, and reserve city banks were permitted to carry half of their reserves as a deposit in central reserve city banks.

With the passage of the Federal Reserve Act a movement was started to concentrate the reserves in the federal reserve banks. This process was completed in 1918 and since that date all commercial banks which are members of the Federal Reserve System—which includes all national banks and such eligible state banks as care to join—have been required to keep their entire legally required reserve with the federal reserve banks. The federal reserve banks in turn, then, keep a reserve against these deposits of the commercial banks.

In order for commercial banks to increase their deposits, then, they must have enough legal reserves—or deposits—with the federal reserve bank of their district to meet the legal requirements. If the increase of deposits of the commercial bank is the result of depositors' leaving funds with them, this offers no problem, because all the commercial bank has to do is redeposit the necessary percentage of these funds with the federal reserve bank. However, if the increase of deposits of the commercial bank is the result of loans, discounts, and investments, the situation is quite different. In this case the commercial bank may not have funds to redeposit. If it is to make the loans,

*The volume of money created by commercial bank loans is controlled by the requirement that they maintain reserves to a certain percentage of their deposits.*

*These reserves are now concentrated mainly in the federal reserve banks.*

*A commercial bank's reserves may be from funds on deposit, if it has enough to redeposit;*

discounts, and investments, therefore, it must find some other means for increasing its reserve balance with the federal reserve bank.

*or it may  
rediscount  
at its federal  
reserve bank  
some of the  
notes it holds;*

There are two general means available to the commercial bank for thus increasing its reserve. First, it may get a loan from the reserve bank and have its account credited with the proceeds. It may do this by what is known as "rediscounting." That is, the commercial bank takes some of the promissory notes representing loans which it has made to its customers and rediscounts them at the reserve bank. Only certain kinds of promissory notes may be used in this way. Specifically, to be "eligible" for such rediscount the notes or bills of exchange (1) must have arisen from commercial, industrial, or agricultural activities (paper arising from purely financial transactions, such as the purchase of securities, is not "eligible"); (2) must have a maturity of not more than 90 days from the date of rediscounting, except agricultural papers which may have a maturity of 9 months; (3) must be endorsed by the rediscounting bank; and (4) must comply with the rules and regulations of the Federal Reserve Board.

*or it may bor-  
row directly  
from the re-  
serve bank,  
furnishing  
government  
securities or  
other accepta-  
ble securities  
as "collateral";*

A more general way for commercial banks to borrow from the reserve banks, however, is by means of what is known as "direct borrowing." In this case the commercial bank makes out a promissory note, which cannot have a maturity of more than 15 days, and pledges collateral, equal to the face of the note, consisting of either "eligible" commercial paper or government securities. The reserve bank then discounts the promissory note, crediting the account of the commercial bank with the proceeds, just as a commercial bank discounts the note of one of its customers.

*or it may sell  
some of its  
holdings to in-  
crease its de-  
posit at the  
federal re-  
serve bank.*

The second broad method by which a commercial bank may increase its balance at the reserve bank is by the sale of some of its holdings of government bonds or bankers' acceptances. If this sale is directly to the reserve bank, the commercial bank's account will be credited with the purchase price and that is all there is to the transaction. In order to increase its balance at the reserve bank, however, the commercial bank does not have to make the sale directly to a reserve bank. It gains the same results by

selling the bonds or paper to anyone; that is, to the "market."

This will be clear if we follow through a simple example. Suppose the First National is in need of additional reserves and sells \$1,000,000 of government bonds to John Jones. Jones will pay for them by drawing a check in favor of the First National. The First National deposits this check—which let us assume is drawn on the Second National—with the reserve bank. The reserve bank then credits the account of the First National and debits the account of the Second National. The end result of the transaction, thus, is to convert \$1,000,000 of bonds formerly held by the First National into a deposit—or reserves—to its credit on the books of the federal reserve bank, and to reduce the deposits of the Second National with the federal reserve by an equal amount. (John Jones' account at the Second National also is reduced by \$1,000,000, which reduces the amount of legal reserve the Second National is required to hold.)

Is there any limit as to how far this building up of deposits with reserve banks, by means of rediscounting, direct borrowing, and the sale of securities, can go? The theoretical limit is set by the provision that the reserve banks themselves must also hold a reserve against their deposits. This reserve, which must be held in gold or lawful money, must be not less than 25 per cent of the reserve bank's deposits. (Until 1945 it was 35 per cent.) Theoretically, therefore, if a reserve bank has, say, 2,500 million dollars of gold or lawful money, it cannot permit the deposits of commercial banks on its books to exceed 10,000 million dollars; and, to follow the process one step further, if commercial banks are required to keep a reserve on the average of 20 per cent, they, then, cannot permit their deposits to rise above 50,000 million dollars.<sup>1</sup>

*A limit on this process is the requirement that federal reserve banks also must maintain a reserve (now 25 per cent) against their deposits.*

*This reserve must be in gold or lawful money.*

### *Some Specific Controls*

In practice, however, there have been few examples of credit expansion reaching such theoretical limits. On the

*The reserve banks try to*

<sup>1</sup> Ordinarily an increase of bank credit expansion is accompanied by an expansion of money in circulation. The effect of this is to reduce the possible credit expansion below the theoretical limits just cited.



*keep credit expansion below this limit.*

*1. They may increase the rate of their rediscounts or loans.*

*2. They may engage in "open-market" operations, selling government bonds for their holdings, so reducing commercial bank deposits and reserves.*

*3. They may tighten up bank loans by raising standards of notes acceptable for rediscount or by requiring more collateral of borrowing banks.*

*4. They may change percentages of*

contrary the reserve system has attempted to keep the volume of credit within what it has considered more desirable limits. To do this it has various "weapons."

1. It may increase the rate at which it will rediscount eligible paper or make loans on direct borrowing of the commercial banks.

2. It may engage in "open-market" operations. This means the buying and selling of government securities and bankers' acceptances in the open market. If the reserve bank, for example, wants to reduce the reserve holding of commercial banks, it sells government bonds. If the sales are directly to a commercial bank, the effect upon the commercial bank's deposit with the reserve bank is obvious: the reserve bank simply debits the account of the commercial bank by the amount of the transaction. But the same effect is also obtained by the sale of the bonds to anyone else. Suppose, thus, that the reserve bank sells the bonds to Sam Smith. Smith will pay for them by drawing a check against his account in his bank, say, the First National. When the reserve bank gets this check, it "collects" it by debiting the account which the First National has with the reserve bank. The net effect, then, insofar as the account of the First National with the reserve bank is concerned, is exactly the same as though the bonds had been sold to the First National. Conversely, if the reserve banks buy government bonds or bills of exchange in the market, it increases the reserve position of the commercial banks, regardless of whether the purchases are from the commercial banks or from individuals.

3. The reserve banks can have a substantial influence on the loan policy of commercial banks through "moral suasion." This "suasion" may consist of nothing more than letting the commercial banks know what policy will be favored by the reserve bank, or it may be carried to the point of "tightening up" on its determination of what paper is "eligible" for rediscount, or of requiring a particular bank to put up more collateral in the case of "direct borrowing."

4. Among the more important credit control powers of the reserve system, is the right of the Federal Reserve Board to change the legal reserve requirements for com-

mercial banks, or more properly stated, to fix the requirement for demand deposits any place between 7 and 14 per cent for country banks, 10 and 20 per cent for reserve city banks, 13 and 26 per cent for central reserve city banks; for time deposits, any place between 3 and 6 per cent.

Our final point on the control of the creation of money: When the Federal Reserve Act was enacted, in 1913, it was carefully designed to give to the Federal Reserve System a substantial degree of freedom and independence in the determination of credit policies. It was provided that the reserve banks should be privately owned by the member commercial banks, that six out of nine of the board of directors of each federal reserve bank should be elected by the member commercial banks of the district—the other three members being appointed by the Federal Reserve Board; and the local board of directors was given the power to initiate changes in the rediscount rate or open-market policy.

Offsetting this localization of authority were the fact that the Federal Reserve Board was to be appointed by the President of United States, by and with the consent of the Senate, and the further fact that this Board was given wide powers of supervision and the right to review the rediscount rates established by the reserve bank boards. On the whole, however, up until about 1934, the reserve system continued to enjoy a substantial degree of freedom and independence in the determination of the credit policies it pursued. There were times, it is true, when the Treasury exerted a dominant influence, but these were the exceptions.

Since about 1936, however, the Federal Reserve System has been brought more or less completely under the control of the federal administration. In other words, today, and for the past several years, the creation of money—the addition to, or subtraction from, the total volume of money in the hands of the public—is under virtually complete control of the federal government, and to an increasing extent the assets of the reserve banks have come to consist of government obligations.

*deposits required for reserves.*

*The Federal Reserve Act of 1913 was designed to give the system a substantial degree of independence, though under the supervision of the Federal Reserve Board.*

*In recent years, however, the system has been brought more closely under the control of the federal government, and the assets of the reserve banks have come to consist more largely of government obligations.*

## THE FUNCTION OF THE MONEY AND CREDIT SYSTEM

*Productive specialization requires a money economy.*

Ours not only is a money economy but, more than that, it has to be a money economy. It is inconceivable that the existing scale of living in the United States could be achieved in any but a money economy. This is reasonably self-evident from an inspection of our daily lives. Without the use of money, how could an economist, for example, directly exchange his services as an economist for the food, clothing, power, shelter, education, transportation, medical service, etc., which he consumes? The people who want his services are not the same ones whose goods or services he wants. Ours is an economy in which productive specialization and mass production have been carried very far indeed. Productive specialization in an economy inescapably compels that economy to be a money economy. A medium is required into which each can convert his own specialized output—a medium which will be accepted by others in exchange for their output of goods or services. This is fundamental.

### *Money Facilitating Production and Distribution*

*Money promotes production and exchange of goods and services.*

Money facilitates the production and distribution of goods and services. It promotes efficiency in our economic activities. It is a device that saves tremendous amounts of labor and capital that would be lost under a barter economy. As a medium of exchange, as a temporary store of value convenient in form and denomination, as a common denominator of value, and as a unit of account in terms of which prices may be quoted, records kept, and credits drawn, money promotes the exchange and production of goods and of services and makes possible the high scale of living which America has achieved.

*It facilitates savings and the transfer of them into investment.*

Another notable function of money and credit is that it facilitates the accumulation of savings in a convenient form and their voluntary transfer as investment to those who expend or use them for greater national productivity. For example, small savers who do not have the means or acumen, and men of large wealth who do not have the talent or inclination, to engage in industry or commerce on their own responsibility deposit their money



in savings banks, or make payments on insurance, or lend it to others through the purchase of bonds or otherwise. Thus these savings are conveniently channeled into investment. Furthermore, the marketability and diversification of securities reduce the risk of owning them, and the consequent lowering of cash reserves makes for fuller employment of resources. The securities markets also make possible the assembly of large funds from many sorts of investors over a wide area, and thereby permit the development of large and efficient plants and the extension of industry and trade.

The individual understands that he does not want money for its own sake, but that he wants the things that money can buy; nevertheless, economic demands of all sorts finally become concentrated and expressed in the single incentive—the desire to obtain money. Hope of reward, fear of loss, and the satisfaction of physical and spiritual wants are the ultimate and imbedded motivations; but in a money economy the desire to obtain money, to utilize it for consumptive or productive purposes, and to prevent its loss, is the driving and directive force in our economy.

One great advantage in a money system which is properly administered and which operates smoothly is that individual citizens can save money instead of having to save by holding goods or by increasing personal ownership of productive plants. If individual savings had to be limited to the accumulation of goods, it would be difficult for thousands of savers to join together to build a plant large enough to make mass production possible. Individuals can save money and then employ that money to buy securities or to let investing institutions, such as the savings banks or the insurance companies, purchase securities. Our people ordinarily do not like to hold idle any more money than they consider necessary for reserve purposes; they spend or invest as much of their current income as they think prudent in the light of all contingencies.

Deposit money is a much more convenient and a much more efficient means for transferring funds than is other currency—except in small transactions. And the 14,000 commercial banks of the country provide a well-

*Money is wanted for the consumption or production it provides. The desire for it is the driving and directive economic force.*

*If individual savings had to be in goods, pooled investment for productive purposes would be impossible, whereas people do not need, and do not like, to keep money idle.*

*Our 14,000 commercial banks provide deposit cur-*

*rency, which is more convenient than "cash" except for small transactions. They also are the chief agencies for extending credit.*

*The extension of credit is a dangerous as well as a constructive device. Privately owned banks are likely to be more careful in lending, because of personal risk, than are government agencies.*

*Changes in money supply are important in affecting prices of goods and services.*

integrated, highly efficient means for transferring funds by check. In addition, these banks represent the chief agencies for the extension of credit, since it is assumed that the individual banks are familiar with conditions in their own communities and able to minimize misuse of loaned funds. The banks are privately owned and, although their lending operations are subject to careful review by the government authorities, and in some categories to actual control, it is assumed that political influences will be avoided, and proper care in credit use insured, if the banker has to take the loss in case the loans are not repaid. As shown elsewhere in this chapter, the process of credit extension has a profound effect on the health and prosperity of our economy.

Experience affords ample demonstration of the fact that agencies of government for the extension of credit are less strict than private agencies and that losses by governmental agencies tend to be large. This is probably because officials of government incur no personal risk or loss in connection with public credit operations, whereas private agencies are continuously policed in the making of loans by the presence of personal risk. Exceptional circumstances must therefore exist if government is to be trusted with the extension of credit. For credit in itself is a dangerous as well as a potentially constructive device, and its operation should usually be entrusted to those who must absorb the loss resulting from their failure to exercise restraint and good judgment.

### *Effect of Changes in Money Supply*

But changes in money supply play a very important role in the economy, for, other things aside, the more money the prospective buyers of services and material goods are receiving in income, the more ready are they to buy, and, in the competition of the market, the more they will offer for the goods; in other words, at least at the moment, the prices of the services and material goods for which the people are expending money tend to rise as the quantity of the money which they have increases.

Of course, an increase in money does not have a buoyant effect unless and until the money is actually

expended. But in most cases a large increase in the total quantity of money, not accompanied by an equivalent expansion of production, is likely to be a disturbing factor in our economy. Money received may be held in pocket, till, or hiding, or depositors may hold it unnecessarily idle in a commercial bank. If the new funds are spent, such spending will tend to push upward the prices of many goods and services; and because most goods and services are interrelated as substitute or complementary articles on the demand or supply side of the market, or as materials and services used in the production of other products, practically the whole list of goods may surge upward in price. The prices of some goods respond quickly and much, others are sticky and laggard, and some may remain stable only if the change in the quantity of money is not too large. The consequence is that the purchasing power of the dollar over goods may decline in varying degrees, with great inequity, disturbance, and distortion in the economy.

If the volume of money is sharply decreased, these phenomena are reversed, but the inequities, disturbances, and distortions wrought by the former increase are not corrected. On the contrary there is added another set of inequities, disturbances, and distortions, and experience shows that the havoc wrought by a marked decline in the volume of sales, and by a sharp fall of prices and wage rates, is as bad as or worse than that caused by a rise. As noted in Chap. XVI, the train of evils wrought by economic fluctuations, or business cycles, is the greatest defect of the present organization of the money-credit economy, and these cycles manifest themselves through the money-credit-price mechanism.

Emphasis needs to be put on the fact that banks or governments, by the extension of money and credit to people or corporations and by affording them new purchasing power, are able to influence the activities and developments of the different industries and the welfare of the different groups in the economy. They are able to influence, but not determine, these things; for after all the people may refuse to expend the added purchasing power, or apprehensions on the part of some may be generated by the actions of the government or banks which will lead

*Increase of money supply, if not attended by equivalent increase in production, is likely to push prices upward, and so to reduce purchasing power.*

*Decrease in supply of money, on the other hand, is likely to lower prices (and wages) and cause serious havoc in the economy.*

*So banks or governments, by creating or reducing purchasing power, can influence industrial activity and general welfare, though*



*public attitude  
is a determin-  
ing factor.*

them to curtail their own expenditures as much as or even more than other groups are enlarging theirs. Similar results may be realized if the government or banks reduce the amount of money and credit allowed to flow to the different industries or economic groups. The encouragement or discouragement of certain economic activities by disproportionate allocation of the amount of money and credit or by discrimination in the terms (the rate of interest, the period, the collateral requirements, etc.) on which the credit can be had, exercises a qualitative influence on the economy which, unless carefully watched, may lead to great dislocations and maladjustments in the utilization of economic resources.

In summary, severe economic disturbances may be caused by any sudden large increase in the quantity of money and credit which is allowed freely to disperse itself through the channels of industry and trade and which is not matched by increasing production and investment. An example would be the payment of a large bonus to war veterans. Likewise, marked economic effects will be caused if government or bankers positively direct money and credit into this or that line of industry or geographical section.

### *A Continuous Process of Exchange*

*Money pay-  
ments attend  
every detail in  
the compli-  
cated process  
of production  
and distribu-  
tion of goods  
and services.*

In other words, the function of money in our economy is to facilitate production and distribution. This process of production and distribution consists of taking raw materials, assembling them, applying labor to them directly or indirectly through machines and tools, changing their form and shape or otherwise fabricating them, and then distributing them through the channels of trade to ultimate consumers where they disappear in consumption. Paralleling this movement of goods at every stage is a reverse series of payments for the goods as they pass from one owner to another. Thus the consumer pays money to the retailer in exchange for goods, the retailer pays money to the wholesaler and receives goods, the wholesaler tenders money to the manufacturer and takes the product of the mill, and the manufacturer pays money to the miner for coal and iron—his raw materials. Each of these persons also

pays money to employees, landlord, and others in exchange for goods and services.

These transfers of money for goods and services are, of course, extremely intricate and involved, but they may be roughly conceived as a movement of goods and services in one direction, and a series of payments in the other direction; as payments of money by individuals to industry in exchange for the products and services of industry, and payments of money by industry to individuals, in exchange for the services and property of individuals, in the form of wages, salaries, dividends, interest, rents, royalties, fees, and the like. Thus we have a more or less continuous movement of money, and a reverse movement of goods and services. By such circulation the money income of the individuals is converted into "real income" represented by the goods and services acquired therefor.

The transfers of money for goods and services are, of course, not automatic and spontaneous, but are caused by the effective demand of consumers to acquire goods and services for consumption, and by the effort of producers to make a profit by supplying goods and services to consumers. Stated from the opposite phase, the transfers are caused by the effort of consumers to acquire a money income which they can in turn use to acquire goods and services for consumption, and by the will of producers to buy the use of land, labor, materials, and equipment in order that they may make a profit by producing and supplying goods and services to consumers.

#### PROBLEMS OF IRREGULARITY AND FLUCTUATION

It is too much to expect that this gigantic economic machine can and will operate with 100 per cent efficiency, without some unwise diversion of energy and materials, without losses, and without readjustments. This irregularity is increased by the fact that the parts of the machine are articulated by the voluntary participation of millions of people, each pursuing his own self-determined methods.

If there were no change in the amount of money, and if every individual and corporate receiver of money were to respend it within an unchanging period, there

*There is a continuous movement of money and a reverse movement of goods and services.*

*The process is not automatic, but depends on the encounter of consumers' demand for goods and producers' expectation of profit.*

*Voluntary character of participation in process produces irregularities.*

would, of course, be no change in aggregate incomes and business receipts and, in the absence of changes in efficiency of production and marketing, the then aggregate dollar value of production, of wages, and of consumption whether high or low, would be maintained.

This sort of stability cannot be characteristic of our economy, for there are periods when industry's sales of goods and services decrease and the people's money income shrink, and other periods when both of these increase. Let us examine what happens to the money in such periods of change.

The smoothness of operation of this mechanism is frequently disrupted by errors of various concerns in producing services or material goods which customers will not buy at prices sufficient to cover costs of production. Errors of this type are, however, constantly being corrected by competitive forces and hence seldom affect seriously the welfare of the nation as a whole.

There are, however, two other factors which cause large variations in the flow of money and which therefore cause great fluctuations in the volume of trade, production, and employment. They are:

*And two other factors cause fluctuations:*

*(1) A flood of new money or a heavy withdrawal of money and (2) acceleration or retardation of the rate of flow of money.*

- (1) The pouring of new money into the stream of payments or the withdrawal of money from that stream, thus affecting the volume of the stream
- (2) The speeding up or retardation of the flow of payments with or without increase in the volume of money

Both forces obviously affect the total flow and hence the total volume of trade, production, and employment. These two factors will now be considered separately.

### *Inflation and Contraction of Credit*

*Increase in volume of money through loans may increase activity but mortgages future income,*

Increases in the volume are commonly caused by the general tendency, in times of optimism, for people to borrow at the banks and use the borrowed money to buy durable goods on installments, such as houses, automobiles, and refrigerators, or to buy securities on margin. Such borrowing at banks increases the money supply and the demand for and production of durable goods, and may



also affect the prices of such goods, but it tends to mortgage the future incomes of the borrowers. Therefore, when they stop borrowing, their total buying power shrinks.

When, later for any reason, optimism changes to pessimism, brokers call for more margin and bankers strive to reduce the volume of loans outstanding. But as bank loans are paid off in such periods, the volume of money, the buying power of potential purchasers of goods, and the demand for durable goods are reduced. Therefore, prices and production tend to decline; in other words, depression appears.

### *Changing "Velocity" of Currency*

The second factor interfering with the regularity of the stream of money and the reverse stream of goods is a retardation of movement caused by the tendency on the part of those receiving money to hold it for longer periods than previously before spending it for goods and services.

Money received as income may not be spent at the usual rate but may be held idle, being carried in pocket, till, safe-deposit box, or hiding, or it may be deposited in a checking account in a commercial bank but not checked out as usual. Income may be either spent for consumption goods or saved. Saved money may be either hoarded or invested. To invest money income is to employ it in a way that will presumably yield a return in the form of interest, profit, or rent. The saver may deposit the money in a savings bank, or buy a bond or stock, or a farm, apartment, or shop. The effect of "investment" is vicariously or directly to turn over the purchasing power to some person or corporation that will use it productively.

The point that needs emphasis is that saving and investing are not identical or even different phases of the same thing. Saving is the "not consuming of income." It may or may not issue as investment. The saver, having "saved," has yet the further decision to make, whether he shall hoard or invest. If he chooses to invest, he must then decide how to invest.

The investment of saved money is a most stimulating process, for, by productive investment, new jobs are created or old jobs maintained, productive efficiency is

*and may lead to depression when credit is contracted.*

*Changes in the rate of spending or investing may have a similar effect.*

*Saving and investing are not the same.*

*Saved income may be either hoarded or invested.*

*Withholding from investment that means expenditure for production reduces demand for goods.*

*The result is a descending spiral—a progressive reduction in flow of money and goods.*

increased, and the scale of living is raised. The secret of the American Way of life is to be found in that this is a high saving and high investing economy and that our savings have been used to build production to such high levels and to reduce costs to such an extent that per capita consumption can be the highest in the world. But if savings are not invested or placed in the hands of an investing institution in other words if they are merely withheld from expenditure, the demand for goods is correspondingly reduced. Industry has paid out money for labor and materials, for the production of goods and services; but it is unable to sell its goods, and is left with unsold inventories equal in value to the amount of money withheld from expenditure by those who would ordinarily have invested in goods or in employment of people who would have bought the goods.

Industry's characteristic response to this situation is to reduce its production rate below its sale rate and thus rid itself of its inventory. Thus the reduction of money expenditures by industry, for labor and materials, may exceed the amount of money originally withheld from expenditure by the people. We have here a descending spiral, the effect of which can be even further multiplied if individuals, observing their declining income, become fearful of subsequent reduction and buttress themselves by reducing the spending of their diminished income and by increasing their holding of money to provide for a rainy day.

Industry, of course, has long since realized that its great contribution to a stable economy is the maintenance of solvency, for only in this way can it maintain production and employment. However, when, after undue expansion, the economic environment makes retrenchment the means of survival, industrial concerns may have no choice but to try to rid themselves of unwanted inventories. One method for doing this is to lower prices, within the limits of the profit margin; another is to reduce production and employment.

Uninvested savings represent a withholding of some money income from expenditure. The net result is similar to that produced by a contraction of the amount of credit extended by the commercial or central banks.

The conclusion is, therefore, that the accumulation of uninvested savings leads to a downward spiral in production, employment, and income, which gets rapidly translated into further reductions in production and income, each reduction rendering more machines and people idle.

### *Methods of Increasing Volume and Flow of Money*

Oppositely, the *volume of money in use* may be enlarged, and thereby make possible additional expenditures for industry's goods and services. This can be done in five ways: (1) Some of the people may take some of their accumulated money and buy goods and services. (2) The people directly, and the government through selling bonds, may borrow at the banks and thus add to their expendable funds. (3) The banks may buy securities on their own initiative and credit the sellers with the proceeds, thus giving to the sellers ready buying power. (4) The government treasury can similarly create money by printing new currency, and the new money thus created can be put into circulation, by government expenditures or debt payments. (5) The central bank can add to the money supply by buying securities, by making loans to the commercial banks, or by reducing the legal reserve requirements. Expansion of purchasing power by any of these five means, other things remaining equal, tends to enlarge the demand for goods and hence to increase production or prices or both.

The amount of money that can be added by the spending of money previously withheld is limited, of course, by the amount of money so withheld; and the banks can expand loans, discount paper, and buy securities only until the ratios of their outstanding credit to their cash reserves or to their capital and surplus approach the minima set by law and business expediency. But the government knows few limits in the amount of new money it can add to circulation, because it can reduce or even suspend its own reserve requirements or satisfy them by devaluation of the dollar, and it can similarly reduce or suspend the bank reserve requirements or keep them flush.

***Both supply and flow of money may be increased by spending savings; by borrowing; by bank purchase of securities; by government issue of new currency; or by action of the central bank.***

***Additions to supply by action of savers or banks are limited, but government (or central banks) can go farther.***



*It may bring about continued inflation as destructive as deflation.*

The supply of new money may be increased even beyond the point of full production. Then, as physical production attains full capacity under an expansion of money, the further increase in money flows finds expression, not in more goods and service produced, but in rising prices. This is inflation and the effects of continued inflation may be as destructive as those of deflation.

### *Methods of Maintaining Balance*

*The problem is to maintain a proper balance.*

*Our money-credit system has permitted booms and depressions, even under central control.*

*The central banks can more easily resist political pressure of private interests.*

A fundamental economic problem is how to maintain and limit the volume of payments to levels not above those which can be sustained by the flow of goods and services, thereby avoiding both inflation and deflation. The maintenance of the volume of payments at such proper levels is not by any means to be sought exclusively in money controls or manipulations. History shows, however, that our money and credit system has served to permit or augment the alternate booms and depressions of the past. The expansibility of bank deposits has served to finance business booms beyond levels that could be maintained and the contractibility of bank deposits has aggravated the subsequent deflation and depression. This means that central banks must "sit on the booms" if we are to escape the depression aftermath. They must administer our credit system with a view to the future as well as to the present; they must resist the ever-present political pressures for "easy money" credit expansion. That is one of the reasons why it is desirable that they should be private, rather than political, institutions.

Such resistance of the central banks to credit expansion is rendered more difficult by the fact that they thereby make credit accommodation costly for apparently desirable projects. The central banks, however, must always remember that, although these projects may apparently be desirable when appraised individually as independent ventures, they are not eminently desirable if piled on top of an already fully active production. The greater costliness thus serves to defer these projects to times when instead of aggravating a boom tendency, they help compensate a depression tendency.

Five general methods, and several variations of them, are or have been proposed for maintaining and limiting the volume of payments to levels not above those which can be sustained, thereby helping prevent depressions and unemployment.

1. *Central bank policy.* This involves the use of rediscount rates, open market operations, changes in reserve requirements, and any other methods available for keeping the volume of credit within proper bounds. The manner in which these various devices operate has been described earlier. Here it may simply be noted that, while these controls can be effective, if properly used, in preventing a "boom," they are relatively ineffective in periods of depression, because people will not borrow for expansion in times of pessimism.

2. *Cyclically balanced budget.* As discussed in Chap. XVIII, this device is politically unworkable and, in practice, puts the government deeper and deeper into debt.

3. *Unlimited government spending.* This method requires continuous inflation and thereby destroys the savings of the thrifty classes of the population. It thus ultimately does far more harm than good.

4. *Government offsets.* Whenever the total of demand deposits in the nation shrinks, the government might offset the shrinkage in the "money" flow by purchasing gold or buying and retiring its bonds. Whenever the total of demand deposits expands, the government might offset the expansion by selling gold or bonds and retiring the "money" received.

5. *Control of money and credit by taxation.* Income, in the form of money and bank credit, can be diverted from private use, (1) in expenditure for consumption or (2) in investment and production, by government through taxation. To accomplish this objective the tax rates must be higher in times of boom, the tax coverage must conform to the pattern of distribution of the income receivers, and the government must not immediately expend or invest all of its receipts. In times of depression the Treasury may, if deemed necessary, operate at a deficit by sales of securities to commercial banks, or may pay out of accumulated funds more than it currently receives from taxation. This

***Current proposals for maintaining safe levels of payments:***

1. *Central bank policies may check booms but not relieve depressions once under way.*

2. *The "cyclically" balanced budget is politically unworkable.*

3. *Unlimited government spending is destructive.*

4. *Government could offset shrinkage in money flow by buying gold or retiring bonds; and vice versa.*

5. *To check inflation, taxation may divert expenditures from consumption or investment, but should not be converted into immediate public expendi-*

*tures. In depression government may sell securities to banks or use accumulated funds to offset lower tax receipts.*

*Investment is the principal means of expanding production and raising the standard of living; it is the best means of creating employment.*

*Investment increases future purchasing power, for the investor and for others.*

*The encouragement to this use of*

means the alternate issue and contraction of paper money. It is a historical fact that governments have been far more willing to expand the currency than to contract it.

These are five mechanisms for manipulating the volume of money and credit. The general course of safety to employ them mainly to prevent undue expansion of the supply of money and credit and thus to avoid a reactive contraction of that supply.

### *The Investment of Savings and Economic Progress*

The current investment of money savings is not necessarily either inflationary or deflationary, yet it is essential to economic progress. Investment is the principal basis for expanding production and advancing the scale of living. It is, moreover, the most acceptable method there is of creating new continuing jobs; the new plant or store brought into existence provides jobs for years to come. The competitive processes in industry make for technological progress, for new laborsaving methods and machines; and new jobs must be found for those released men, as well as for the annual increment to working population.

If the money for the added capital expenditures is derived out of current income, by diverting expenditures from the purchase of consumption goods to purchase of production goods, there is no immediate increase in the aggregate volume of purchases. On the other hand, it provides the basis of increased purchasing power for others and eventually, if in successful enterprise, for the investor. If, instead of using all his income for purchasing consumption goods, the saver buys stocks and bonds sold by industry to individuals, he thus turns over to industry the funds needed to provide more productive equipment, to purchase materials, and to hire labor. Thus, the money returns to the people again. Obviously this series of transactions may be repeated time after time.

Investment is thus seen to be the logical and desirable antidote for the ill effects of holding funds idle. The individual's instinct to save is satisfied; his savings or surplus income is not dissipated in "high living," but its value is retained as protective purchasing power against future



emergency or need; and his expenditure by participating in enterprise (by direct buying of production goods or by purchasing securities) rebounds in maintaining the value of the savings and perhaps in increasing it by profits, rent, or interest earned. To induce the saver to turn investor it is necessary that he have reasonable confidence that he can in event of need reconvert his investment, particularly the stocks and bonds, into money.

*savings is a reasonable confidence in reconvertibility into money.*

## CURRENT CONTROVERSIES ON MONEY AND CREDIT

### 1. *Government Expenditures as a Substitute for Private Investment*

A doctrine which has enjoyed wide acceptance during the past decade is that government expenditures are an adequate substitute for investment by business and industry. Investment involves the disbursement of income but does not contemporaneously bring goods on the market which must be currently sold. Government expenditures do the same thing, and so it is claimed they are an adequate substitute for private investment.

*Government expenditures are currently proposed as a substitute for private investment.*

The proponents of this thesis even argue that, as a means of dispersing "purchasing power," government expenditures are in several respects superior to business credit. For one thing, they claim that the economy does not have to rely on the slow and unsure response of private individuals to the prospects for profits in business ventures, since the government can launch at will, on time, on the scale, and at the spot, when and where the employment of "purchasing power" will be most helpful. Reliance on this doctrine is of doubtful wisdom.

*One argument is that the response to the need of purchasing power is quicker and and more accurately placed.*

1. It involves the assumption that government management and manipulation of our economy are desirable; that government is a wiser control agent than the free response of the nation's savings in the hands of millions of business people to the hope of profit; and that private enterprise is not to be trusted. Those who believe in the private enterprise system deny this premise. There is no likelihood that the government employees who will be called upon to make decisions will be wiser, prompter, or more efficient in disbursing the "purchasing power." On

*But this argument assumes government management of our economy desirable, wiser, and more trustworthy. These premises are questioned.*

*Government spending is likely to be unplanned and wasteful.*

*Nor will a downward spiral be so reversed if private enterprise is not stimulated by collateral policies that create confidence.*

*It is argued also that government spending which does not increase supply of consumers' goods may maintain prices and*

the contrary, political considerations are likely to distort the plans and their extension.

2. Government expenditures are most easily made directly to consumers in the form of bonuses or for "boondoggling." It is difficult to spend money with speed and in volume except as approximate gifts. It takes time, skill and planning to expend it economically for public works.

New money put into the hands of consumers will be provided that other conditions are favorable, move the unsold excess inventories of industry and may stop the downward spiral or even reverse it. If, however, for some reason, such as the unlikely prospect of profit, or the threat of higher taxes, or government competition, industry is not stimulated by its higher cash holding and lowered goods inventories, the spiral will not be reversed by the government spending, the economy will run along on a depression level, and the consumers will call for more government contributions, which become the chronic remedy.

When and if the government shifts its expenditures from the relief type to the so-called "production" type, the economy may acquire a fixed plant, which, if it is well planned, will provide continuing jobs for the people. Such government plants are likely, however, to be operated in an uneconomical manner and in competition with private plants. This invasion of the domain of private enterprise by government is likely to cause a contraction in the rate of private expansion of plants in those fields, which will offset and perhaps exceed the government outlay.

Advocates of government spending as a remedy for depression contend that not all kinds of investment are equally useful in checking the descending spiral. They say that the kind most efficacious in bolstering the national income is the one that does not increase the supply of consumers' goods for a long time to come, for if consumers' goods flow onto the market from the new investment (plants) in a short time, they tend too soon to depress prices and profits and, therefore, to check investment. Therefore, the construction of a house, bridge, or sewer which will yield consumer services over a long amortization period, say, 25 or 50 years, is better for the purpose

han investment which takes the form of an increase in inventories. From this angle government expenditures are said to be the best type of investment, inasmuch as it is not necessary that they involve the sale in either the near or distant future of extra consumers' goods. Even expenditures for purposes of providing war material may be considered ideal, for those products never reach the market. And, pursuing this idea further, some contend that insistence on amortization and self-liquidation is an error in government projects; they argue that the best expenditure is for parks, beaches, and other outlays which supply consumer services but make no sales in competition with private production and get no revenues. To the extent, however, that such a program discourages private investment and enterprise, it makes for the politically dominant socialist state and makes more rather than less difficult the climb out of depression.

## 2. *Bank Credit as a Substitute for Venture Capital*

A second doctrine widely accepted of late is that bank credit is an adequate source of venture capital. The proponents of this doctrine go so far as to argue that bank credit is "an ever-present help in time of trouble," so that, when private savers cease investing their savings, the banks should step into the breach and freely lend to (buy securities of) business, industry, or government. The argument is quite the same when it is urged that individuals should borrow from banks and use the proceeds to buy securities of business and industrial corporations.

In weighing this doctrine it should be noted that it is concerned with venture capital, not with proved triple-A bonds of existing corporations. It has never been regarded as wise to allow banks to invest in stocks or speculative bonds, and such practice has been prohibited by law. By nature of the monetary functions banks perform they must be stable and sound, and their assets should fluctuate but little in value. It would be a mistake to allow the banks to invest in equity holdings in corporations that are really "venturing." Slightly less condemnation can be levied against banks that lend heavily on collateral consisting of

*profits and so protect investors.*

*But the discouragement of free and continuous investment for profit makes for the development of a socialist state and retards recovery from depression.*

*Another doctrine widely accepted is that bank credit is an adequate source of venture capital.*

*To perform their proper monetary functions, however, banks must keep their assets sound and fairly stable, and not enter into risky ventures.*



*And against their main liabilities, demand deposits, they must carry "quick assets"—short-term notes or liquid securities.*

*Commercial bank loans are now either self-liquidating or so protected by collateral as to be quickly liquidated if necessary.*

*On the other hand loans against non-marketable assets may be-*

equity, speculative, or venture securities. The experience of 1929 led the Congress to authorize the federal reserve authorities to restrict the use of bank credit for such purpose. And it is not less dangerous in the long run for the government so to use funds borrowed from the banks.

Second, it should be noted that the chief liabilities of commercial banks are their demand deposits. Sound banking practice requires that each bank carry, against such liabilities, "quick assets" at least equal in amount to such deposits. Experience shows that, for the bank which selects its risks carefully, losses arising from inability to collect what is due on such assets are negligible in amount. Furthermore, under all but exceptional circumstances, the steady inflow of payments is sufficient to meet all demands of depositors for cash. In case of a "run," such assets can readily be rediscounted; hence the bank dealing only in such short-term paper is in little danger of being forced to close its doors.

Loans made to farmers to enable them to buy seed or feed, loans made to manufacturers to cover costs of materials and finance production, and loans made to traders to finance exchanges of goods are, ordinarily, self-liquidating, old loans being paid off as fast as new ones are made, and hence are not inflationary in character. Loans made to speculators are not necessarily self-liquidating and hence, if allowed to expand to excess, are likely to result in large increases in the total volume of bank deposits outstanding. Loans of this nature, however, are protected by liens on commodities or usually marketable collateral securities. Therefore, although speculative loans when carried to excess inflate currency, lower the value of the dollar, and generate booms, they do not, ordinarily, endanger the solvency of banks. Since, as a rule, the collateral securities and speculative commodities are readily marketable, the banks can, in case of need, usually protect themselves by selling the collateral.

By contrast, the bank which accepts as collateral for loans such assets as mortgages, chattel liens, and other nonmarketable assets, can but rarely avoid loss by selling the collateral if the borrower fails to pay his loan when due. Such loans, therefore, tend to become "frozen." In

time of distress, it is usually difficult or impossible to rediscount paper secured by such collateral; hence any serious "run" is likely to force the bank to close. Clearly, therefore, the financing of the fixed capital requirements of enterprise is not a proper function for a commercial bank.

Those who are bent on making a case for the use of bank credit as venture capital declare that our country owes its tremendous and rapid development to its unit banking system, because our bankers were local men interested in promoting the locality, willing to lend freely on all sorts of risky ventures, and to buy securities of new industries as a means of getting them started there. They give little attention to the heavy losses which such banks suffered year after year and to the high interest rates that had to be charged to cover these losses if the banks were to survive. They are not greatly concerned about the inordinate number of bank failures this policy drew in its wake, for they point to the packing house, or office building, or trolleys, or paved street that have been brought to town and that survive the financial wreck. They are spenders, and magnify spending as the way of progress in the world. In the long run, the economic development of the United States would have been less costly had it used less bank credit.

### 3. *Bank Credit and the Price Level*

Another doctrine which has had wide acceptance in the past decade is that great expansions of money and bank credit are not dangerous provided that the commodity price level does not rise. This was a prevalent doctrine in the latter 1920s when, despite the expansion of credit, the commodity price level scarcely rose at all. The people were awakened rather suddenly and cruelly in 1929 to the fact that they had chosen to rely upon the wrong indexes.

Several times in this discussion it has been emphasized that the mere creation or existence of a large volume of money will not raise prices; it is when, as, and if that money is used to make purchases that it raises prices, and

*come "frozen," and financing fixed capital requirements of enterprise is not a proper function of commercial banks.*

*The record of the furnishing of venture capital by commercial banks, when that was permitted, abounds in costly bank failures and financial wreckage.*

*The doctrine that expansion of money and credit is not dangerous, if inflation of commodity prices does not result, was disproved in 1929.*



*Such expansion inflates prices, first, when and where purchases increase; then pushes up the general price level. In the 1920s real estate and securities were the main fields of purchasing and inflation, but the general price level was kept up in spite of technological improvements.*

*The inflationary program of the 1930s did not have much effect on the general price level, because much of the new money lay idle.*

*The effect of the expansion money, however, was to reduce earnings of savings, to increase the proportion of idle money, and to weaken*

the prices first affected will be those of the goods bought after which other prices also will tend to rise. During the 1920s the larger money volume was expended in considerable part, for urban real estate and securities and the prices of both rose greatly. That is where the inflation of credit was showing its effect most clearly.

Moreover, it has also been emphasized that if the volume of goods offered on the market expanded equally with the money expended on those goods, the prices would not be much affected. During the latter 1920s the technological advances and the expansion of industrial output were so sizable that the general price level of commodities would have declined had it not been for the larger volume of money and bank credit pouring onto the commodity market. The physical volume of sales, wholesale and retail, rose greatly.

During the 1930s the cause of the inertia of prices of commodities lay elsewhere. The great spending spree and other inflationary activities of the government did not "reflate" prices to the 1926 level as was planned. Part of the newly created money lay idle or was offset by the slowing down of other funds. Much went for retirement of debts. The people gave greater weight to liquidity and the desire to save their fortunes than they gave to enhancing them by venturing. The environment was too charged with hazards for investment. Basically the government was critical of bankers, men of wealth, industrial managers and the individual enterprise system. The universal wait was "idle men and idle money." The creation of more and more money did not avail, for the holders would not venture. This reluctant attitude prevailed up to the start of World War II.

Those who engineered this futile attempt at elevating the price level were frustrated but took consolation in the notion that no harm was done by this expansion of money, since prices did not rise. But the effect was to bring into being large amounts of idle money, and the dangers inherent in idle money are many. It makes for "easy money"—lower and lower interest rates and terms unduly favorable to the borrower. It affects the investments of insurance companies, forcing them to increase premium



rates, and it forces savings banks to reduce the rates paid on savings to levels which discourage that vital process. It tempts the government to attack savers and investors alike by high taxation, government competition, and threats of expropriation. Since industrialists and businessmen do not seem to be leading in their proper and traditional way, the government is tempted to step in under the leadership of government planners, state socialists, and other enemies of individual enterprise. Much of the large volume of idle money has been created by sales of government securities to the banks, diverting them from their true function of facilitating agriculture, industry, and commerce and converting them into instruments of inflation. The expansion of the government debt has a train of evil financial, political, and economic consequences all its own. And finally, when and if recovery and boom ever get started, the existence of the great volume of idle money creates a dangerous situation, for the techniques of credit control quite generally depend upon the restraint attached to borrowing; but if borrowing is not necessary, the boom may proceed to dangerous levels on a cash basis before the control devices become at all effective.

In part, the notion that the volume of money and credit can be increased with impunity, as long as the price level is not raised, is born merely of too narrow a definition of inflation. To many people the term "inflation" has a strong emotional content; they think of it not as a process but as an effect, and that effect is the evil of high and rising prices. Conceived as a process, inflation has many evil effects and not merely the one of high and rising prices. The monetary pressure may be exerting itself for some time against unemployed resources and active competition. The more quickly the flow of goods adapts itself to the increased demand, the greater may be the increase of purchasing power in a given interval without jumping prices excessively; only in the "bottlenecks" will the inflation really register itself in price advances. In these bottlenecks the increase in attempted or actual spending avails but little, if at all, in dragging a larger supply onto the market. In this sense there can be price inflation in one market and not in others, and it has the general effect of distort-

*control whenever an upturn should come.*

*Inflation is a process of which a rise in prices is only one of several evil effects.*

ing the structure of production and of raising the marginal cost of production.

#### 4. *Government Expenditures and the Public Debt*

*The doctrine that expansion of government expenditures is self-financing has not been proved by experience,*

*and obviously leads to unlimited extravagance.*

Still another doctrine increasingly popular in recent years is that the expansion of government expenditure will so increase the national income that tax rates need not be increased and yet the revenue will expand enough to balance the budget and offset the expenditures; in other words, a policy of government expenditures is self-financing without any heavier tax burden.

The most obvious argument against this is that it did not work in the decade of the 1930s, but, if such a doctrine of government spending can be successfully argued and put into effect, the sky becomes the limit of public expenditures, national income, and taxation. Why should Congress or the Treasury worry about governmental outlays if they automatically and assuredly increase national income sufficiently so that the tax rates to which the people have become accustomed will currently produce revenue enough to cover the outlays?

It is interesting to remember that during the 1930s, while government expenditures were mounting at an utterly unprecedented pace, the Administration did not rely on this self-financing theory, although it was preached in budget messages and in Congress. In real fact, tax rates were pumped to record levels, exemptions were lowered, and the kinds of taxes multiplied; and yet, in spite of this violation of the self-financing theory, deficits occurred year after year.

#### 5. *Monetary Management*

*It is true that the working of our money and credit system has shown inadequacy, which recent experiments*

The monetary and banking history of the United States is strewn with the wreckage of shortsighted, ill-fated efforts to manage money. Most of these efforts have represented a sincere effort to manipulate the monetary and credit mechanisms to the advantage of the nation. But, though the debacle of the early thirties presented convincing testimony of the inadequacies of the system, certainly that decade of experiment provided us with the very oppo-

site of the stability which we should have. It is doubtful that we shall even now give really adequate attention to this vital problem. But, since money and credit are both vital elements in the economy, no one proposes that they be left to chance. On the contrary, they deserve the most careful thought about the principles, both as regards theory and as to methods of application, which will transpose money and credit from dangerous mechanisms, which at times produce booms and aggravate depressions and at times bring our economic system to prostration, into useful instruments for maintaining stability in the economy and for enhancing wealth and welfare.

Although there is no difference of opinion as to the desirability of constructive management of money and credit, competent students recognize the tremendous theoretical and practical difficulties in money management and are far from agreement as to the standards which should be applied in actual practice. They even differ widely as to whether money management should be left to the judgment of constituted authority or subjected to automatic controls. Such students recognize that, in the absence of proper monetary management, fluctuation in the quantity and quality of money and credit may cause devastating swings in income, business, and employment. For example, government often intervenes in monetary management through its tax, spending, and credit policies, but apparently is not conscious of such intervention and does not analyze the results which may follow from the policies in question. Thus, these policies often produce unexpected and violent fluctuations in business, or even disastrous booms or depressions.

Great progress has been made in the collection and interpretation of data which concern money, credit, and production. In the course of time we may hope that monetary management can be reduced to a practical science, so that relationships of cause and effect, as well as reasonably reliable forecastings, can be based upon full and accurately compiled statistics. At present, however, there are strict limitations within which it is desirable to attempt management of money and credit. In the first place, authorities in the fields of economics and finance have not

*have not corrected; but money and credit may yet be made to realize more fully their potential usefulness.*

*Authorities are agreed on the desirability of constructive management of money and credit, but differ as to the controls required.*

*Progress in the collection and interpretation of data gives promise of solution of the problem.*



*At present, however, management of money and credit should be undertaken only cautiously since authorities do not agree, those entrusted with management are not always the best informed, and political considerations have too great weight.*

*Meanwhile action which has demonstrably bad consequences should be avoided.*

*Money and credit management will be ineffective in helping to put at work idle men, money, and machines if the productive investment of savings is not at the same time encouraged.*

under all circumstances been able to agree upon what policies are justified by the available data. Second, those entrusted the management of money and credit are not always entitled to be described as authorities, nor are they always those with the best training and experience in handling the highly technical and complex money and banking organizations which are characteristic of the existing economy. Third, political considerations frequently supplant close adherence to the implications of monetary financial, and economic data, insofar as scientific interpretation of those data has been developed.

Accordingly, management of money and credit should be allowed to unfold step by step as more complete understanding develops and policies become less subject to expert disagreement and unexpected results. Moreover, it must be recognized that social and political considerations are an essential part of a properly functioning economy under a democratic government. This does not sanction however, legislative and administrative abuses in regard to taxation, money, or credit, about whose inflationary and deflationary consequences there is considerable agreement among authorities. For example, it is improper for government to assume that the consequences of inadequate taxes, combined with lavish expenditures, may be disregarded, simply because the Treasury can always obtain additional funds by borrowing from commercial banks.

Hence the conclusion follows that money management is not likely to prove to be a panacea for the economic ills which have their manifestations in idle men, money and machines. It is necessary also to encourage the productive investment of savings, with resulting increase of employment, output, and the scale of living. If monetary management is employed by government otherwise than in conjunction with, rather than as a substitute for, these means of obtaining and maintaining prosperity, satisfactory results cannot be expected. Properly employed, however, monetary and credit management is able to render outstanding services in maintaining stability in the economy and in avoiding those dislocations involved in booms and depressions.

## HOW MONEY AND CREDIT MAY RENDER BEST SERVICE

Experience teaches us that there are several conditions which must be met if money and credit are to render the services of which they are capable without causing the dislocations involved in the wide swings from boom to deep depression and back again.

1. It would seem that provisions should be made for full exchangeability between the different kinds of money without affecting the total supply of money or without forcing a contraction in bank credit in use. This means that the Federal Reserve System should stand ready to use its power to maintain and limit the volume of money and credit to levels not above those which can be sustained by the flow of goods and services. And the process should be virtually automatic.

2. The quality of the assets which secure our circulating and bank money should be kept high. This means that banks should maintain adequate reserves, possess a solid capital cushion, and hold loans and investments of only the highest quality and of the proper maturity. It also means that currency should be issued only against sound assets. There is no escaping the conclusion that it is dangerous for both the monetary and the banking system to permit either currency or bank credit secured by government securities to expand indefinitely. The advantages mentioned are not likely to be realized unless the commercial banks are privately owned and subject only to those regulations and restrictions on their credit operations which will aid in maintaining the quality of their assets. Private administration and ownership, under proper government regulation, of the organizations supplying risk capital as well as long-term credit is likely in the long run to be much more conducive to national welfare than government administration and ownership of the credit mechanism.

3. The central bank and currency control mechanisms should be simply designed so that they may be easily understood by politically appointed administrators and will not be likely to be unintentionally misused. It is far better that authority over monetary and banking

*Several conditions must be met for full use of money and credit.*

*1. The Federal Reserve System should use its power to maintain and limit the volume of money and credit.*

*2. The quality of assets which secure our money should be kept sound, and is best assured by private ownership and administration of our credit mechanism, under proper government regulation.*

*3. The central bank and currency control should be in hands of independent, responsible, and competent authorities.*

*4. The quantity of money and credit should be independent of Treasury fiscal policies.*

*5. The area of administrative decisions should be limited as much as possible by provision of automatic self-adjustments.*

*6. Monetary stability is preferable to either accidental or planned instability. The best situation is where the*

matters should be concentrated in the hands of responsible authorities fully conscious of the economic effects of their administrative actions. The advantages of central bank and currency control would be realized, under independent, responsible, and competent authorities, if the central bank were the sole issuing agency for circulating paper currency, and if authority were granted for the central bank to buy and sell monetary metals in such a way as to maintain the stability of the money supply. In the world as it is, we should not allow conditions abroad to dictate changes in the domestic monetary supply.

4. The quantity of money supply and the quality of credit should be independent of Treasury fiscal policies. The role of the Treasury should be to collect taxes and to sell securities to investors other than commercial banks. The decision whether central banks should buy United States government securities should be vested in the central bank authorities rather in the Treasury.

5. In a government system such as ours, the area of administrative decisions should be limited as much as possible and reliance should be placed on automatic self-adjustments wherever feasible. For example, in time of boom when the demand for bank credit seems to be in excess of those levels which can be maintained, the banks ought automatically to be placed in a position where they can make additional loans only with funds obtained through the liquidation of investment-type assets, and even then only at rates sufficiently high to discourage borrowing. On the other hand, a contraction in the demand for credit should automatically ease the bank position and thus cause banks to seek loans more aggressively. Reliance on a fully automatic system of monetary and banking adjustment is obviously impossible; but our monetary and credit systems will serve our enterprise system better if the government authorities concerned make an effort to set up machinery for partly automatic control instead of constantly tinkering with a machine whose smooth functioning is essential to the economic health of the whole enterprise system.

6. It seems clear that general monetary stability is



preferable to either accidental or planned instability. Wide fluctuations in money and credit, whether they are planned or result from imperfections in the system of automatic controls, are to be avoided. The situation which is best for business and therefore for employment is one where, within the framework of general improvement, the volume of money and credit is maintained and limited to levels not above those which can be sustained.

*volume of  
money and  
credit is main-  
tained at and  
limited to a  
normally ten-  
able level.*



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## IX

# PROFIT AND LOSS IN THE ENTERPRISE SYSTEM

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**N**O other part of the field of economics is subject to so much controversy and misunderstanding as profit. Opinions vary all the way from the view that profit is nothing less than a capitalistic method of exploitation of workers to the view that profit is the very lifeblood of social, economic, and political progress. Even the meaning of the term "profit" is a matter of disagreement. So is the question of how profit is to be calculated. And when we get to such problems as that of the relation of profit to wages or why profit is essential in an enterprise system, almost every conceivable view is to be found among writers in the field of economics.

It is the purpose of this analysis to try to clear up some of those matters of disagreement. First, we discuss the meaning of the term "profit" itself. We attempt to explain the reason for the existing confusion and present a positive concept which is both readily understandable and in harmony with current usage in the business world. Second is an analysis of the function performed by those who receive their payment in the form of profit. Third, we discuss the problem of what determines the amount of profit. Included in this section are brief descriptions of such concepts as "fair profit," "normal profit," and "excess profit." Fourth, we take up the question why profit is necessary, pointing out that it is an inherent part of organized production and is present, although perhaps under a different name, in every type of economic activity. Finally, we give a resume, in so far as statistics are available, of the record of profits in this country over the past several years.

### I. WHAT IS "PROFIT"?

Someone once said that in a free country it is the in-born right of every man to make his own definitions. When

*Profit is a subject of widespread controversy and misunderstanding.*

*We aim here to present a positive concept; to analyze the function of enterprisers for profit; to discuss what determines the amount of profit; to show why profit is necessary; and to add statistics on the records of profits.*



terms are defined in a manner contrary to accepted usage however, confusion is certain to result. That has occurred in connection with the term "profit."

### *Two Varying Conceptions*

*Theoretical economists and practical businessmen have had different conceptions of profit.*

*To the businessman, profit is the difference between sales of goods and services and costs he incurs.*

*Theoretical economists calculate "pure profit" by adding to costs allowances for*

For generations "profit" has been defined by many academic writers on economics in ways which had no meaning to practical businessmen. And for an equally long period businessmen have been using the term in a way which to many theoretical economists has been confusing and misleading. This difference between practical usage and the analysis of these academic writers probably has been more responsible than any other one factor for the present confusion in connection with the word. If such confusion is to be eliminated this difference must be resolved. This should be possible without doing violence to the views of either group, because fundamentally they are striving for the same end; namely, to explain the amount and character of that portion of our total national income which is not accounted for in the form of wages (including payment to management), interest, and rent.

To the businessman, profit is the difference between the price at which he sells goods and services and the cost of such goods and services to him. If he is a manufacturer, his costs, as he sees the problem, include what he pays for raw materials and supplies, for wages and salaries, for interest on borrowed money, for insurance, for rent, for taxes, for depreciation of his machinery, factory, and other capital investments, for depletion and obsolescence, and for any necessary amortization of other obligations. If the price he gets for the product or service he sells is more per unit than such costs, the businessman considers he is making a profit; if the selling price is less than the aggregate of these costs, he considers that he is suffering a loss.

The theoretical economists to whom we have referred, in contrast, contend that in order to determine whether a business operation is successful one must go further and calculate what they term "pure profit"—a phrase which is quite foreign to the vocabulary of the ordinary businessman. To get the amount of such "pure

profit" two items not included by businessmen must be included on the side of costs. These are (1) an allowance for interest on the owner's own capital which is employed in the business, equal to what he would receive in interest if he lent his funds to someone else, and (2) an allowance for the services performed by the owner, the equivalent of what he would receive in wages or salary for such services if he were to perform them for someone else.

Now from a theoretical point of view, it may be granted, there is something to say for this conception of "pure profit." Why should earnings on one's capital be counted as a part of profit when the capital is used in his own business and be called interest if, as a result of a loan, it is used in a business owned by someone else? Likewise, why should the compensation one gets for working be called "profit" if it is derived from his own business and wages if it is paid by someone else?

#### *A Practicable Concept Requires Measurability*

But, as a practical matter, there is no choice but to follow the terminology of the business community, even though it does involve these difficulties. There is no choice because the only way one can determine with exactness what his services are worth in the market is for him to stop working in his own concern and take an identical job with someone else—which is impossible since the fact that it is with someone else would prevent it from being identical. Determination of what should be allowed for interest on one's own capital is almost equally impracticable. One can determine the going rate of interest for certain types of loans, but that is not the same thing. What is needed to meet the requirements of the orthodox theory of pure profit is to know the amount which one would earn on his money if it were lent to be used in a situation exactly comparable with that in which one uses it himself. That too, of course, is impossible.

For the purpose of bookkeeping or accounting, therefore, or for the purpose of adding up the costs, on the one side, and subtracting them from the selling price, on the other side, "pure profit," according to such a theoretical conception, is so difficult to compute, or even to

*interest on owners' capital and services performed by owners.*

*The items added to compute "pure profit," however, cannot be exactly determined.*

*The businessman's concept, therefore, is alone practicable.*

estimate with accuracy, that it is of little or no use in the conduct of a business. One may be certain, therefore, that businessmen in the future, just as in the past, will not attempt to adopt this theoretical conception as the basis of their calculations.

### *Is Profit a Result of Imperfect Competition?*

There is another important aspect in this theoretical conception of profit. This is whether profit is a primary or a residual element in our economic system.

*The same theoretical economists also view "pure profit" as a "residual element" which under perfect competition tends to disappear, but remains as competition is imperfect and capital and labor are not perfectly fluid.*

According to the analysis of the economic theorists whose views we have mentioned, profit in the true sense, or "pure profit," is a residual element which in the case of any single concern or product constantly tends to disappear. Their reasoning on this, in general, is that under conditions of perfect competition, with full fluidity of capital and labor, if anyone is able to make more on the capital he uses in his own business than he could gain by lending it for use in some other business, or more for his services than they would bring if he hired himself out to some other employer, competitors will immediately enter the field and thereby the "excess" earnings will be eliminated.

In other words, with perfect fluidity of capital and labor, everyone tends to shift his funds to those places which he thinks will yield him the greatest return. And, since this shifting increases the supply of funds available in the high-return fields and reduces the supply of funds in the low-return fields, the return on capital throughout the economy tends to stability at the "pure-interest" level. Thus, according to this analysis, the only variation from the "pure-interest" level tends to be limited to the amount necessary to allow for differences in the risk involved between one place and another.

Likewise, in the case of payment for services, there would be such shopping around that every worker of the same skill would receive exactly the same wage—a perfect balance thus being arrived at between working as an employee and working for one's self.

It is recognized by those who follow this line of reasoning that in practice new ideas and new concerns



constantly are emerging and hence as of any given moment there may be "pure profit" in the economy—in fact, there is certain to be, year after year and decade after decade. But this does not change their basic assumption, namely, that pure profit is the result of the imperfection of competition in an economic system.

Such an analysis makes profit, at least by implication, nothing more than the price which society as a whole has to pay because of the lack of perfect fluidity of capital and labor. This is not the same, it should be noted, as saying that profit is undesirable. On the contrary, it assigns to profit a fundamental function in the economy—the function of attracting funds and ability to, or from, those activities which are out of line with the remainder of the economic system and thus tending to bring such sections back into balance. But, even so, such a conception leaves much to be desired. It is based upon the idea that under "perfect" conditions there would not be profit—that profit is somewhat like a doctor's bill, justified when one is ill, but in ideal circumstances one doesn't get ill.

But the fact is that even with perfect fluidity of capital and labor there would be profit as the term is used in the business world, and as the term is used when one speaks of profit as an essential motivating force in the economic system. There would be profit because in the business sense profit is just as definite a part of the cost of getting goods and services produced as are wages, interest, and rent. That is, profit, as the business community understands and uses the term, is the reward for the contribution of ownership in underwriting the responsibilities and hazards arising from the operation of a business. It is the payment for the contribution of one of the essential factors of production just as truly as wages are a payment for the contribution of labor, or interest the payment for the use of borrowed money, or rent the payment for the contribution of land or some other durable production good.

### *A Practical Definition*

More briefly expressed, profit, in the business sense, is the aggregate monetary reward or payment for the

*They recognize the persistence of profit, however, as attracting effort from obsolescent or less serviceable to new or more serviceable enterprise.*

*But profit would be essential with perfect fluidity, since it is as much a factor in production as wages, interest, or rent.*

*In the business sense, profit is*

*the payment for the service of those who accept the ultimate financial responsibility for a business.*

*Businessmen have merely a more inclusive view.*

*services performed by those who accept the ultimate financial responsibility for a business.* As such it includes any return on their funds used in the business, compensation for any services they as owners may perform, and rent on any of their land or other durable production goods that may be used. So defined, the term "profit" is a usable concept. It does not become entangled with the amount of wages, rent, and interest paid by a business, and it isolates the element of profit from the remainder of the total national income and thereby enables us to analyze and appraise the function of profit in the economic system of today.<sup>1</sup>

Is there any means by which this concept of profit as used in the business community can be reconciled with the meaning assigned to the term by those theoretical

<sup>1</sup>It is recognized, of course, that accounting procedure varies widely among business organizations. In large corporations, or in fact in any organizations in which the "management" is hired, the salaries of such management necessarily are considered as a part of the cost of doing business, just as are any other wages. In these instances, therefore, we encounter no difficulties in the use of the concept as just defined. And this remains true even though members of the managerial group own a few shares of stock in the corporation, for obviously such ownership does not change the fact that fundamentally these persons are performing their services as employees rather than as owners.

In small corporations and in partnerships or individual proprietorships in which the owner actually manages the business, however, the distinction between ownership-income and salary-income is much less clear-cut. In such cases it is not unusual that a "salary" for the owner is counted as an expense of the business, just as are other wages; and income-tax procedure under certain conditions recognizes such charges as legitimate as long as they are "reasonable." This practice should not blind us to the basic fact that such salaries are basically different from other wages or from the salaries of hired managers. In the latter case the salary is a definite obligation of the business concern and is a first lien on its income; in the former case—salary paid to the owner—there is and can be no such obligation and such a salary does not constitute a lien on the income of the organization. All told, therefore, the complication arising from the accounting practice in many business concerns of making a deduction for salaries to the owner does not change the basic soundness of the concept we have explained above.

It may be noted parenthetically, too, that there is no such complication in the case of interest on the owner's capital used in the business, or in the case of rent for any of his land or other durable goods used in the business. No charge is ever made for these items in the computation of profit, although theoretically there is as much justification for considering a "reasonable" charge for these items as an expense as there is for considering a "reasonable" charge for the owner's time and services as an expense. In the discussion which follows, therefore, we ignore the difficulty caused by this inconsistency in accounting procedure and use the term "profit" to indicate the "aggregate monetary reward or payment for the services performed by those who accept the ultimate financial responsibility for a business."

economists who think of profit as resulting solely from imperfect competition? Clearly the answer is in the affirmative. The difference is a simple one of definition. It arises, not because the two groups disagree as to the character of profit, but because the business community employs the term in a more inclusive sense than these economists.

The economists, in their search for theoretical refinement, see profit as the "excess" income which an enterpriser gets over what he would receive if he worked for someone else and lent his capital to others. The business community, in contrast, sees profit as the total income an enterpriser gets from his venture, without regard to whether it is more or less than he would receive as an employee of some other concern. These economists devote their analysis, therefore, to the problem of what gives rise to this "excess" income of an enterpriser, whereas businessmen devote their attention, not to what gives rise just to this "excess," but to the enterpriser's income as a whole. Or again, to use a medical analogy, these economists see the problem of body temperature as merely a question of what causes it ever to rise above  $98.6^{\circ}$  while businessmen see the problem as also involving what makes it  $98.6^{\circ}$  to start with. To businessmen a temperature of  $103.6^{\circ}$  is a temperature of  $103.6^{\circ}$ ; to these economists it is merely a temperature of  $5^{\circ}$ .

*While economists look at what excess, if any, an enterpriser gets above current interest rates, or wages if he were employed by others, businessmen are concerned with what creates his income as a whole and so maintains enterprise.*

### *The Enterpriser a Residuary Legatee—and More*

Before we leave the subject of the character of profit, one further point deserves analysis. This is the question whether profit is a residual element.

From an accounting point of view it is clear, of course, that profit is a residual element. It cannot be otherwise. In accounting procedure and terminology, profit is what is left after all costs and charges have been deducted from income or sales. If these costs and charges exceed the income or sales, the residual item is a deficit or loss. Profit or loss, then, from the accounting standpoint, is the balancing item between income and outgo within a given period.

*Profit is a residual element, it is true, since it is what is left after all costs have been deducted from income, and also since it is not assured contractually*

Profit is a residual element also from another viewpoint; namely, that of contractual relations. The wage



*as are wages, rent, and payment to suppliers.*

*The enterpriser is a residuary legatee, with the added obligation of liability for losses.*

*Only the possibility, hope, or prospect of adequate profit, in the long run, offsets the enterpriser's risk.*

earner has a contract to receive a definite wage; the manager—if he is distinct from the owner—has a contract covering his salary; the landlord has a contract covering the rent he is to receive; the suppliers of materials have contracts covering the prices they are to be paid. But the owner—the enterpriser—cannot have a contract covering his profit. He gets what is left after these other commitments are fulfilled—if there is anything left. If nothing is left, he has to absorb the loss up to the limit of his assets in the case of an individual business or partnership, or up to his investment in the case of a corporation or other limited-liability organization. In other words, the enterpriser always is what may be termed the “residuary legatee” of the operations of a business. As such, all other commitments have priority over his claims.

But his position differs from that of the residuary legatee of an estate in one important particular. If an estate is not large enough to meet the prior claims, the residuary legatee is under no obligation to make up the difference; an enterpriser, as the residuary legatee of the operations of a business, up to the limits just noted, is under such an obligation. That is, the enterpriser is liable for any losses resulting from the operations of the business. And only by so conducting the business that such losses do not amount to more than the total net income of the business can the enterpriser get a profit—or, more properly stated, get paid for the services he performs, the capital he employs, and the risks he runs.

Now, obviously, no one will devote his services, invest his capital, and accept the liability for losses, if he believes that nothing but losses will result from a venture. This does not mean that he will not be willing to sustain losses while the concern is getting under way. Nor does it mean that he has to be convinced that once his organization gets going there will never again be losses. It does not mean even that he is certain that, on balance in the long run, there will be no losses. But it does mean that he must believe that the possibility of such losses is more than offset by the chance of making an adequate profit out of the venture.

It is for this reason that the more risky a venture is

—the greater the chance of loss—the greater must be the possibility of profit. Therefore, it follows that, if we are to have the benefit of investment which involves a large element of risk (and most major new developments are of that character), it is essential that the way be left open for correspondingly large profit. In other words, as we restrict the possibility of profit, through taxes or otherwise, so we restrict the degree of risk which individuals will be willing to undertake. And if, through taxation or otherwise, we eliminate the possibility of profit—profit on the average over a period of years—we thereby eliminate the possibility of private investment.

In this sense, then, profit is not at all a residual element. On the contrary, profit, or the reasonable expectation of profit, is the primary consideration in determining whether a new business will be started or a new process developed, and whether established concerns will be expanded, or contracted, or even continued. And only when the demands on this score are met—only when the potential enterpriser believes the chance of profit outweighs the chance of loss by an adequate margin—will an individual undertake those contractual relations which automatically make him liable for losses which may result from the venture.

Briefly, then, profit is a residual element from the point of view of its measurement, but equally it is the initial and essential element in the inducement of enterprise.

## II. THE FUNCTION OF ENTERPRISERS<sup>1</sup>

Let us now turn to an examination of the function performed by enterprisers—those who, as we have just seen, are liable for losses incurred by a business concern.

<sup>1</sup> It is regrettable that there is not some other term which might be used to designate those to whom we refer as "enterprisers." All of us are members and parts of the enterprise system—the poorest paid day laborer just as truly as the highest paid corporation executive; the poverty-ridden tenant farmer just as truly as the wealthiest ranch owner; the newsboy just as truly as the news publisher. And all of them as they go about the "ordinary business of making a living" show more or less enterprise. When we refer to one particular group as "enterprisers," therefore, we do so not because they are more enterprising than other groups, and certainly not with the idea that they *are* the enterprise system. We apply the term to them solely because we know of no better designation.

*In so far as possibility of profit is restricted, the degree of risk is restricted that enterprisers will undertake.*

*Although profit is a residual element in enterprise, the prospect of profit is the initial and essential factor in the inducement to enterprise.*

### *Who Is the Enterpriser?*

*Who is an enterpriser?*

First, just who is an enterpriser? In the case of a small one-man concern the answer is obvious—the man who owns and runs the organization. The answer is obvious also in the case of a partnership in which the partners, in addition to owning the company, actually manage its affairs. But what of a larger organization in which the actual management is by one or more persons who are hired to run it? Who is the enterpriser in these instances? Is it the owner, who, having selected “the management,” just sits back and waits for results; or is it the managers—those who make the day-to-day decisions upon which the success or failure of the concern largely depends?

*The enterpriser, in all cases, must be the owner or owners, who accept the ultimate financial responsibility.*

The answer is that in all cases the enterpriser is the owner of the concern. In other words, a sharp distinction must be made between the function performed by an enterpriser and the function performed by a mere “manager” of a business. The enterpriser may also be a manager, but if a person is merely a manager working for a salary he cannot possibly perform the crucial and distinctive function of the enterpriser. A manager may assume certain immediate responsibilities, but he cannot assume the ultimate financial responsibility of the organization. A manager may even promote and, through his activities, get an organization established. Further, the size of his income may be dependent upon the success of the concern. But all of this still does not make him an enterpriser. To be an enterpriser one must be in a position to accept the final financial responsibility for the success or failure of the organization. Until one attains that position his income, regardless of whether it is called salary, fees, commission, bonus, or so-called “profit sharing,” belongs to the general species of wages. This is true because such a person fundamentally is merely a “hired hand,” an employee working for the enterpriser; it is only the enterpriser who receives income in the form of profit and is liable for the losses that may result from the operation of the organization.

### *The Enterpriser's Ultimate Function Not Delegated*

If, as just stated, a mere manager may handle the promotion, organization, and direction, and arrange for



the financing of a business concern, what, then, specifically is the function performed by an enterpriser? In general it may be said that it is his function to bear the noninsurable risks of business. Such noninsurable risks are present in the operation of every business, no matter how large or how small it may be. They are the risks of unfavorable changes in prices, either of the elements going into the finished product or of the finished product itself; the risk of changing public taste; the risk that some competitor will bring out a product which the public prefers, or an identical product at a price below one's cost of production; the risk of errors of judgment, of labor troubles, or unfavorable legislation; the risk of changed general economic, political, or international conditions which curtail or destroy the market for one's product; the risk of the selection of capable management and personnel; and so on through an almost endless list.

It is not necessary, of course, for the enterpriser himself to attempt directly to forecast such conditions and to decide how best to meet them. Such work may be, and in the case of large business organizations almost always is, delegated to others—to a board of directors, or a special committee, or to some specialized authority. But such delegation is merely the authority to make decisions, not the ultimate financial responsibility for the correctness of the decisions—not the financial responsibility for making good any loss that may be incurred. This ultimate financial responsibility, this liability for losses, as indicated above, cannot be delegated. It is inherent in the position of an enterpriser. No one who does not have such responsibility can be an enterpriser; everyone who does have such responsibility is an enterpriser.

So much for the specific function performed by enterprisers — the function which distinguishes them from all others connected with a business. But perhaps one more aspect of the subject needs further analysis. The distinction, as we have said, is clear-cut and easy to follow in the case of small, compact organizations whose owners are few in number or whose control is concentrated. In such organizations the owners may all keep closely informed on the expertness with which the hired managers are doing

*The enterpriser bears the various noninsurable risks of every business large or small.*

*The authority to make decisions may be delegated, but not the ultimate financial responsibility.*

their job, and if, in the opinion of the owners, the work of the managers is not satisfactory, it is a relatively simple task, in so far as the necessary authority is concerned, to replace them. But what of the large corporation—the corporation, let us say, with hundreds of thousands of stockholders, none of whom, or no small number of whom, has majority control?

*When shares of a large corporation are so widely distributed that holders can know little of organization and operation of the company, and are little interested in exercising functions of enterpriser, are these owners really enterprisers?*

The American Telephone and Telegraph Company is an outstanding example of this situation. Who is the enterpriser in this instance? One can readily see that if there are only four or five stockholders in a corporation it should be relatively easy for all of them to get together and, on the basis of intimate knowledge of the company, decide on a course of action. But it is not possible to get the approximately 650,000 stockholders of A. T. and T. together. Equally it is impossible for all of them to have enough knowledge about the internal organization and operation of the corporation to arrive at a sound judgment on whether a change of management or policy would be wise. Still further, a large proportion of the stockholders are not even interested in the exercise of such an "ownership function," and if it were made a prerequisite for being a stockholder they would sell their stock. In other words, these persons bought the stock and continue to hold it because they think it is an attractive investment. Their primary concern is the dividends they receive and the price they will receive for their shares in case they decide to sell. Many of them probably do not even know the name of the person—the president or chairman of the board—who is managing their "property."

Is it still true, in the face of these facts, that such a stockholder is an enterpriser, that such a stockholder assumes the ultimate financial responsibility for the success or failure of the concern, that such a stockholder is liable for the losses of the organization? And if it is true, how does this stockholder perform this function? As the owner of 1 or 10 or 100, even 1,000 shares of stock, he cannot hope to influence the management, to say nothing of getting the management changed in case he becomes convinced it is incompetent. In view of this how can such a stockholder perform the function of an enterpriser? Isn't

it sheer legal fiction to maintain that the stockholders, rather than the managers, are the enterprisers of such an organization as A. T. and T.?

No, such a contention definitely is not just sheer legal fiction. It is not necessary, in order to be an enterpriser, actually to manage the business. This function, as stated above, may be delegated. The distinguishing feature of an enterpriser is that he bears the ultimate financial responsibility of a business. It is clear, therefore, that the stockholders of A. T. and T. are just as truly the enterprisers of that organization as are the five persons who own the stock of a little manufacturing corporation, or two partners who pool their resources, set up a business, and hire some one to manage it for them. But notice in saying this we use stockholders in the plural. It is the stockholders as a unit who are the "enterpriser" of a corporation. The individual stockholder is a part of this whole—is a part of the "enterpriser"—in the proportion that his holdings bear to the total stock outstanding. As such, and in this proportion, he directly shares the ultimate financial responsibility of the organization. If it is profitable, he receives his proportionate share, either in the form of dividends or as accumulated assets; if it suffers losses, he bears his proportionate share through the reduction of the accumulated assets by the amount of the losses. On the strictly financial side, therefore, we encounter no difficulty on the question whether the stockholders of a corporation as a whole are the enterpriser of the organization.

### *How Small Stockholders Exercise Power*

But what of the problem of the inability of the holder of a few shares to influence or change the management? Or, to take an even more extreme case, what of the situation where, because of the wide dispersion of ownership, it is virtually impossible as a practical matter to get a majority of the ownership to act directly as a unit, with the result that the management of the concern is in fact self-perpetuating? Does not this mean that, although it may be true that the individual stockholder bears his proportionate share of the ultimate financial responsibility of the concern, he is unable in practice to exercise even his

*They are collectively the enterpriser, since they share proportionately the ultimate financial responsibility, and the gains and losses are reflected in the value of their shares.*

*How can they exercise the power that should attend such responsibility?*



*They can sell their stock to express dissatisfaction.*

*Generally the market will reflect public appraisal of conduct of the company.*

*The small stockholder with only indirect means of influencing policies has compensating advantages in opportunity to participate in profitability of large corpora-*

proportionate share of the power which is an inherent part of this financial responsibility, namely the right to hire and fire the managers and thereby exercise control over the policies pursued?

Beyond doubt, in a large, widely owned corporation a stockholder is not able effectively to exercise some of the power that properly resides in an enterpriser. Too much, however, should not be read into this fact. The small individual stockholder, although he cannot fire the management, has an effective means for expressing his judgment on the management and the policies it is pursuing. This is through the market. If the small stockholder becomes dissatisfied with the success or outlook for the company and cannot get enough of his fellow stockholders to agree with him to bring about a change, he is able to register his dissatisfaction by selling his stock. But, it may be asked, wherein does that change the basic situation? May not the new stockholder be equally dissatisfied, and equally powerless to do anything about it? No, this obviously cannot be the situation. The new stockholder necessarily is satisfied with the management and outlook for the company, or else he would not buy the stock.

Further, it should be noted that if dissatisfaction with earnings, public relations, or the outlook for the company causes any appreciable number of stockholders to sell, the price of the stock will decline, thus registering an appraisal of the management and a readjustment of return on the capital investment to the new stockholders. Similarly, good management is appraised through an enhanced demand for the stock and a rise in its value.

What we are saying, in other words, is that the market provides a continuous check and appraisal upon the management and prospects of our widely owned large corporations. It is not so direct a check, and perhaps not so forceful, as is found where there is concentrated ownership or where there is only one owner who hires a manager. And beyond question this lack of directness and force involves certain disadvantages. On the other hand it has certain distinct advantages. It enables the person of moderate means to participate in the profitability of our great corporations, to gain the benefits of being an enterpriser with-

out having to carry the burden of becoming actively involved in the problems of management, and to spread his investments over a wider area of activity and thereby gain the security which comes from diversification of risks.

All things considered, therefore, even though the small stockholder in a large corporation is unable directly to exercise some of the powers which properly belong to an enterpriser, he gains certain other advantages which at least tend to offset this curtailment of his powers. And always, if his opinions are shared by those who in the aggregate own the majority of the stock, it is possible to recapture this "lost" power and take any action deemed desirable.

In other words, to return to the thesis with which we started, the stockholders as a whole are the enterpriser of a corporation, with all the power and rights and functions of any enterpriser. The fact that this power which resides in the whole cannot be fully exercised by minority parties raises many important practical questions, which are discussed elsewhere as a part of the problem of corporations, but it does not change the basic situation.

### III. WHAT DETERMINES THE AMOUNT OF PROFIT?

What determines how much enterprisers get for the assumption of the ultimate financial responsibility of a business? How much is such assumption of responsibility by enterprisers worth to society as a whole? And is there any way by which we could get the work of enterprisers performed more cheaply?

These, of course, are the real questions in connection with profit. Let us look at them in the order stated.

What determines the amount of profit? Obviously there can be no simple answer to this question. A thousand factors have an effect on the amount of profit, not only for the economy as a whole but even for a single business organization. Nevertheless, it is possible to indicate certain broad considerations that are of controlling importance, at least in all but the exceptional cases. Specifically, omitting such factors as taxation, government regulation, and the like, which are discussed elsewhere, four such considerations are worthy of mention.

*tions and to diversify his risks by spreading investments.*

*And the stockholders as a whole have all the power and rights of any enterpriser, though the majority makes the decisions.*

*How is the share of the enterpriser determined?*

## 1. *The Supply of Investment Capital*

***1. The supply of investment capital in the market influences the rate of profit; the more capital seeking investment, the lower the profit rate, and vice versa.***

The first is the question of capital. One cannot be an enterpriser unless he has funds with which to start an enterprise. In some instances, of course, the amount required is small; as, for example, in setting up a newsstand. In other lines, such as steel production or the manufacture of automobiles, the minimum requirement runs to millions of dollars. What factors determine the amount of capital available in an economy is too large a problem to analyze at this point—it is discussed extensively elsewhere—but clearly the adequacy of the capital supply is one of the factors which influence the rate of profit. In general it may be said that in the long run the greater the supply of capital in relation to investment possibilities, the lower the rate of profit; the smaller the supply of capital in relation to investment possibilities, the higher the rate of profit.

## 2. *The Supply of Competent Enterprisers*

***2. The enterpriser's choice of the type of business, of location, and of management requires ordinarily more than commonplace judgment and involves much risk.***

The second is the question of the job to be done in relation to the number of persons capable of doing it. Being an enterpriser—a successful enterpriser—is not an easy task even in the best of circumstances. And the fact that the enterpriser—whether an individual proprietor, the members of a partnership, or the collective stockholders of a corporation—may delegate the actual running of his business to others does not change this situation. There are still the problem of selecting those to whom such authority shall be delegated and, even before that, the problem of determining the nature of the business into which one shall enter. Neither of these is a problem which can be taken lightly. How many of us would be capable, for example, of determining with correctness whether we might with success open up a grocery store in our town, of deciding where the best location for it would be among those places which we possibly could afford to rent or buy, and of selecting a man, from among those available at the salary we could afford, who could run the store at a profit? Yet, if one is to open such a store, all these problems must be met; if the store is to be a success and yield a profit, they must be solved correctly. Comparable problems, in fact



even more difficult problems, are found in every business.

And there is no way by which an enterpriser can escape such problems. Consider what faces the person who buys stock in a well-established and successfully operated business concern. All the pertinent facts about the organization, let us assume, are available, but how many of us are capable of appraising them in a way which will assure that such a venture as an enterpriser will be a success? The record shows that only a small proportion of us possess such ability—that the vast majority of us as investors in corporations end up with a loss rather than a profit, just as we do when we decide to open our own store or undertake any of the other thousand and one lines of activity that constantly attract persons to try their skill as enterprisers.

What we are saying, in other words, is simply that the job of being a successful enterpriser requires a skill which many of us do not possess. Furthermore, many of us who do possess the skill are unwilling to assume the risks and responsibilities inherent in the job of being an enterpriser, except as minority stockholders. And we accept this limited responsibility, not because we are desirous of becoming enterprisers, but solely with a view of supplementing our income. In considering what determines the amount of profits, therefore, we must bear constantly in mind that there is a limited supply of available persons who are capable of being successful enterprisers, and hence a higher price has to be paid for the performance of this work than is paid in less skillful occupations.

Not all enterprisers, of course, get larger incomes than do persons in occupations requiring less skill. Many enterprisers continue to perform their function for a mere fraction of what they could get by devoting their energy to other work. They do this because they have a commitment from which they cannot free themselves except at too heavy a loss, or because they believe conditions will improve, or because various noneconomic factors — independence, prestige, etc. — offset the pecuniary loss they are suffering. But, by and large, a person becomes an enterpriser only when he sees the possibility of getting a higher income than he can obtain in any other manner.

*The investor buying shares of an established business is no less subject to such decisions affecting profit.*

*The special skills required of successful enterprisers are in limited supply, and the risks and responsibilities of enterprise will not be assumed without expectation of substantial reward.*

### 3. *Competition between Self-employment and Other Employment*

**3. *The successful enterpriser could work successfully for others also, as an employee. He is likely to expect a larger return as an enterpriser. This, too, has an influence on profits in the general field of enterprise.***

The third broad consideration determining the amount of profit is the fact that anyone who is capable of being a successful enterpriser, at least in the sense of devoting his full time to the venture, is also capable of doing something else for which others will be willing to pay him a wage. This is true all the way up and down the economic scale — from the person who can run nothing more complicated than a corner newspaper stand to the person who can direct successfully the largest industrial corporation. This establishes for each of these persons a minimum value for his services below which he will not consider becoming an enterpriser. Again, it may be pointed out, this does not mean that such an amount will be realized by everyone who actually decides to stop working for others and strike out for himself as an enterpriser. But it does mean that he will not leave the security of having a wage and set up business for himself, unless he believes that his income in the form of profit will be greater than his income as an employee. The only exception which needs to be made to this general rule is for those cases where noneconomic factors — independence, social esteem, pride, etc. — have an influence. But in general, in spite of these exceptions, we may say that one's earning capacity as an employee sets what may be called a minimum supply price for enterprisers and, unless there is a chance that the profit to be derived from going into business for himself will be at least as great as this supply price, that person will refuse to accept the responsibilities of an enterpriser.

### 4. *Efficiency and Expertness of Management*

**4. *The amount of profit of a business depends also upon the efficiency and expertness of its management in rela-***

The fourth broad factor determining the amount of profit is more difficult to put into clear-cut terms. It concerns the question of efficiency and expertness of management in relation to one's competitors and to the economic system as a whole. Everyone has seen examples of the contrasting courses of two business organizations which superficially appeared to have about equal chances of success; in actual operation, one forged ahead and the other made

no progress at all and ultimately failed. In our everyday jargon we explain this by saying that the owner or manager of the successful concern is "a better businessman" or has "a better business head" than the other. And in a way that is entirely correct and tells the story better than pages of high-sounding economic phrases. For, when we say someone is "a good businessman" or has "a good business head," we mean all those qualities — honesty, ambition, industry, good judgment, fair dealing, ability to see ahead and to take advantage of opportunities, administrative capacity, etc. — which are essential to meeting the problems that constantly arise in every business. We mean also when we use these terms that this person is more valuable as the head of a business than someone whose endowments do not fit him so adequately for such a post. To no small extent, therefore, the amount of profit of an individual business organization depends upon the efficiency and expertness of its management in relation to that of its competitors.

### *Relation of General Business Conditions*

For the economic system as a whole, however, another factor has to be considered in relation to the efficiency and expertness of management, in order to get the complete picture. This is the general condition of business, including the trend of the price level, the willingness of the public to spend money, government policies, etc. With "good business conditions," profit as a general rule is higher than when we are suffering a depression. It is not true, as is sometimes said, that in prosperous years "everyone makes money." Far from it. Even in times of greatest prosperity a large proportion of our business firms earn no profit — as will be shown later. But this does not alter the basic fact that the general state of business has a direct and immediate bearing upon the amount of profit in the economic system as a whole. In general it may be said that with rising prosperity those firms which have continued to show profit through a depression make a still larger profit, and more and more of the less efficient firms move out of the loss column into the profit column.

To summarize, then, the four broad social factors —

*tion to that of its competitors and to the economic system as a whole.*

*General conditions affecting business, of course, also affect managerial success — such as trend of the price level, public confidence, and government policies.*



aside from taxation, government regulation, and the like — which determine the amount of profit, both for the individual concern and for the economic system as a whole, are: (1) the adequacy of capital in the possession of those willing to become enterprisers; (2) the requirement, for successfully performing the function of an enterpriser, of a skill which is possessed by only a portion of us, or, in other words, the limited supply of enterprisers; (3) the constant demand as hired managers or employers for those capable of being enterprisers, which establishes a lower limit below which the possibility of profit will not interest such persons in accepting the responsibility of being enterprisers; and (4) the efficiency and expertness with which a business is handled in relation to its competitors and the economic system as a whole.

### *Current Terms Applied to Profit*

What is the relation of this explanation of what determines the amount of profit to such concepts as normal profit, excess profit, excessive profit, and fair profit? And how does it allow for monopoly profit, paper profit, capital gains profit, speculative profit, inventory profit, etc.?

***"Normal" and "excess" profit are terms used for tax purposes.***

"Normal profit" is a term used by the U. S. Treasury for tax purposes. Specifically it is the average earnings of a corporation over a period of specified years, or the profit made in what is designated as a "normal" year, or a stated percentage on the capital investment.

"Excess profit" also is a term used for tax purposes. It means the amount in excess of "normal."

***"Excessive" profit is a matter of judgment.***

"Excessive profit" is a term generally used to denote the amount by which profit exceeds what the one using the term believes justified. During World War II the term was generally used to denote the amount which government authorities "recapture" through the renegotiation of war contracts.

***"Fair" profit, likewise, is an arbitrary conception.***

"Fair profit," likewise, is a purely arbitrary concept and, as a basis of passing judgment upon the profit of a going business concern, it is almost completely meaningless. Without analysis of the specific case in question, profit, as explained above, is the difference between the total receipts of a business and its total expenses. It repre-

sents, therefore, in the case of a large organization, the sum total of almost innumerable transactions — of almost innumerable sales, against each one of which must be set the costs involved. Whether the profit of the concern is “fair” or “unfair” would properly depend upon whether the profit in each of these individual transactions is “fair” or “unfair” — not upon the aggregate volume of profit, or this aggregate volume in relation to capital invested, or what other comparable companies are making, or what the concern in question has made in past years.

“Monopoly profit,” as the name clearly indicates, is profit that is derived from taking advantage of having and exercising monopolistic power. It is thus to be contrasted with profit made in a competitive field.

“Paper profit” is a term much used in speculative markets. It means profit that is not yet realized — and frequently it is never realized — through sale of a security or economic good which has advanced in price.

“Capital gains profit” refers to the profit made from appreciation in the value of a piece of real estate, or other durable goods, or securities held as investments.

“Speculative profit” is just what the term indicates — profit made from speculation in land, commodities, or securities.

“Inventory profit” is the gain that results from appreciation in the value of merchandise or raw material while it is in the process of manufacture, or while on the shelves awaiting sale.

And so on in the case of all similar terms. In all cases the element of enterprise, as explained above, enters. One may or may not like the kind of activity which gives rise to the profit. That is another question. In every instance cited the profit represents the reward or payment for enterprise.

Not all forms of gain, of course, are profit. So-called windfall or fortuitous gains are a case in point. A good example of such gains is the fortunes which some Indians have obtained from the receipt of oil royalties paid to them, following discovery of oil, by outside independent prospectors, on land which our government had deeded to the Indians. Such gains are the result of luck or good fortune

*“Monopoly profit” contrasts with competitive profit.*

*“Paper profit” is unrealized through sale.*

*“Capital gains profit” comes from rise in value of capital property.*

*“Inventory profit” is rise in value of goods in stock between purchase or completion and sale.*

*There are “windfall” or fortuitous gains, accrued without contribution of an enterpriser,*

*which should not be classified as profits.*

which has no relation to any risk taken, or any effort made by the recipient. Granted it is not always easy as a practical matter to draw a clear straight line between such gain and profit, the fact remains that windfall or fortuitous gains are no more "profit" than they are wages or interest or rent, and it is regrettable that the term "profit" ever is applied to them. Profit, as stated above, is the payment for the contribution of the enterpriser. It is not a matter of luck or fortuitous circumstances except in so far as an enterpriser can take advantage of such conditions in the conduct of his business. In what has been said before and in what follows, therefore, we are not discussing income that one receives through blind chance. We are discussing income that is received as a result of the contribution made by enterprisers to the over-all productive process of society.

#### *How Much Is Enterprise Worth?*

*What is a reasonable price to pay for the function performed by an enterpriser?*

The comment just made — that profit is the payment for the contribution made by enterprisers to the over-all productive process of society — leads us to the second broad question raised earlier: How much is the function performed by enterprisers worth to society? The general answer to this question might be that it is worth whatever the public is willing to pay. But that, while true, is an unsatisfactory answer. In the first place, it actually does not tell us anything, and, second and more important, none of us likes to be gouged. What we really want to know is: What is a reasonable price to pay for the function performed by an enterpriser? So stated, the answer becomes clear, for obviously a reasonable price is one which is openly arrived at without compulsion on either side.

How do we get such a reasonable price for the work performed by enterprisers? That is, how can we assure that profit will be reasonable? We assure this by making certain that there is a free play of competitive forces. Let us see how that works.

For this purpose we may well consider an example which at first glance would appear to be simple and with which we all come in constant contact — the local grocery store. How do we test the reasonableness of the prices



we pay in such a store? Superficially we test it by comparing such prices with what other stores charge. If our grocer charges more than we have to pay in some other store, we are likely to draw the conclusion either that our grocer is a poor businessman, or that his costs are excessive, or that he is making too much profit. But if there is another store at which we can buy our groceries at a lower price we have in our own hands the means for correcting this situation. All we have to do is buy at the store which sells at the lower prices. And if a substantial proportion of those of us do that, we force the high-price store either to lower its price or to go out of business. If, therefore, there is another store at which lower prices prevail — prices which yield only a reasonable profit — it is impossible for our grocery store to hold its prices up to a level which will yield it an unwarranted profit.

But that is only the more superficial aspect of the question whether his profit is reasonable. To get the complete picture two other points have to be analyzed.

Let us assume that, although our grocer and his competitor across the street both charge the same prices, our grocer makes twice as much profit per unit of sale during the course of the year as does his competitor. Does that mean that his profit is excessive? To answer that we need to ask another question: If our grocer charges the same prices, what is it that makes it possible for him to make twice as much profit as his competitor? There is only one way he can do it. That is by better management — by showing greater skill as an enterpriser. This greater skill may be reflected in more judicious buying, in having selected a better location for his store, in presenting his merchandise more attractively, in offering more service, in seeing that his customers always receive courteous treatment, or in the scores of other things that so frequently are the difference between success and failure in the business world. Is it proper and reasonable for our grocer to be paid for this greater skill? Obviously it is just as proper and reasonable as it is for a master carpenter to be paid more than an apprentice. In both instances the difference is the result of differing ability to do a job. The fact that in the one instance the pay is in the form of wages, and in the

*The consumer regulates prices where there is free competition.*

*In competition a more efficient management may earn more profit than a competitor at the same prices.*

*This extra profit is an incentive to greater efficiency; and this incentive should not be destroyed by artificial profit restrictions.*

*Lowering prices, however, to increase sales and so profits, is a normal process in free competition.*

other instance it is in the form of profit, is of no importance whatever from the point of view of the fairness of the payment.

But, it may be asked, why should not our grocer be forced to reduce his prices below those of his competitors and be satisfied with a smaller unit profit? He should not be forced to do that for the simple reason that he would then have no incentive to use the skill which enables him to render the better service and thus to make the greater unit profit. If, regardless of how hard he works, of how well he takes care of his store, of how careful he is in his buying, etc., he is not permitted to make any more profit per unit than his inefficient and careless competitor across the street, why should he bother to make all this extra effort to run his store? The answer clearly is that he would not bother. And in that fact is a fundamental truth about profit. This is, that although government can eliminate profit through restrictive measures it cannot thereby capture such profit for consumers. In the case of our grocer for example, government could eliminate the greater profit he makes because he is a better manager than his competitor across the street, but that would not enable us — the customers — to buy our groceries at any lower prices. Rather, all government would succeed in doing is to destroy the incentive which is the cause of the profit and we would end up by paying at least as high prices as before.

In other words, the only way we can get lower prices is for our grocer to decide that it is to his advantage — and he measures this advantage in terms of profit — to lower his prices. This completes the circle, for in that case his competitor will either have to meet those lower prices or go out of business. And that, it should be noted, is what constantly takes place in a competitive system of individual enterprise. The better enterpriser — the grocer with lower costs — decides that, although he makes a good rate of profit per unit when he just meets the prices of his competitor, he would make still more profit in the aggregate if he lowered his prices and thereby got a larger volume of business. So he lowers his prices and we, the consumers, get the benefit. But, in time, another grocer comes along whose costs for one reason or another are still lower, and he offers

his goods at still lower prices. And so it goes, year after year, decade after decade, and generation after generation — as long as the successive enterprisers are permitted to convert their ability into profit.

If they are not permitted to do this, or if government, through taxation, regulation, or otherwise, effectively eliminates this chance of an enterpriser to make profit, such progress does not take place, and the public is prevented from getting more and more goods, of better and better quality, at lower and lower prices. That, rather than its effect upon the earnings of enterprisers, is the serious aspect of governmental attempts to restrict the profit motive. Whether an enterpriser, or group of enterprisers, makes more or less profit is in itself of virtually no importance in the over-all picture. What is important is the effect such freedom to make profit has upon the welfare of the rest of us. It is the difference between progress and stagnation, the difference between a living, prosperous democracy, and the intellectual sterility and economic slavery of a dictatorship.

The other point that needs to be analyzed in determining whether profit is reasonable, as the problem impinges on our daily lives through our grocery store, is concerned with the prices which the grocer himself pays for his products. This will determine in large measure what he has to charge us. In consequence, even though his markup is modest and his own profit reasonable, this does not necessarily mean that we are not being gouged — that in the price we pay there is not at some point back along the line an element of cost which reflects too high a price for the function performed by some enterpriser. How can we be sure that this is not so?

Again the answer is competition. The goods on the shelves of our grocer are a summation of a large portion of the economic activity of the nation. If at any point prices are not determined in a free market, there is at least the possibility that the product is not being offered for sale at as low a price as that at which someone else, if he had the opportunity, would be able and willing to sell it. In other words, under these conditions someone not only has a monopoly position but is using this power to charge a price

*Freedom to profit by increased skill and efficiency and service is a mainspring of progress.*

*And competition needs to be free all along the line, from producer of raw materials to retailer of finished goods.*



which reflects, not just his costs of production plus a payment for accepting the ultimate financial responsibility of the venture, but as well a charge for the fact that he has attained a position which enables him to take advantage of those who need his products. (The problem of monopoly prices is analyzed in detail in Chap. XII.) When this is the case, we no longer have the assurance that profit will be held at a reasonable level.

*This freedom  
will keep  
profits  
reasonable.*

It is for this reason that freedom of competition is so important. So long as there is freedom of competition — so long as prices are determined in free markets — profit cannot properly be considered to be unreasonable. This does not mean that everyone will make the same per-unit profit. Not at all. But it does mean that under these conditions it is impossible for enterprisers to get paid more than that amount which represents their relative contribution to the production effort. And this amount will be determined, not by what they may think their contribution is worth, and not even by what the public may think their contribution is worth. Rather, it will be determined by what others in the same field of endeavor are able and willing to do.

*In free competition, profit is a measure of the relative ability of enterprisers to meet a public demand for goods and services.*

In other words, profit, under conditions of free competition, is a measure of the relative ability of enterprisers to meet a public demand for goods and services. Only when we destroy the accuracy of this measure, by permitting the development and misuse of monopoly power, or when we destroy the incentive of enterprisers through taxation and crippling government regulation, do we get profit rising to a higher level than is necessary to get the production and services desired by the public. Only then can enterprisers get paid more than their services are worth.

#### IV. IS PROFIT NECESSARY?

We come, then, to the last of the three basic questions asked above: Is there any way by which we could get the work of enterprisers performed more cheaply? Or to state the question in an extreme form: Is profit necessary?

*Enterprisers Essential under Any System*

Let us approach that question by asking still another:

Is the function of the enterpriser necessary? The answer clearly is in the affirmative. Regardless of the form of economic organization and regardless of the size of the producing unit, if we are to have organized production the function of the enterpriser must be performed and his work must yield a return — a return which is identical with what is known as “profit” in a system of individual enterprise.

Consider, for example, the case of an isolated family which is engaged solely in production for its own use. Under such circumstances there would be no “business” in the sense of buying from and selling to others; hence we may assume that no money payments would be made and no books would be kept. Further, let us assume, since we are not discussing the question of thrift, that nothing would be left over at the end of the year. Nevertheless there would be something in the income of such a family which would correspond to what we call profit in the business world. This would be that part of the income which exists solely because someone, say the father, performs the function of an enterpriser. If the father was shrewd and of good judgment — in short a good enterpriser — he would so organize and direct the activities of the family that its well-being would be greater than it would be otherwise — and this additional factor of production might easily make the difference between relative comfort and severe want, just as it makes the difference between success and failure in the business world.

Likewise the element of enterprise as a factor of production is present under communism. In such a state there is presumably no private enterprise, and no sum of money which can be tagged with the label “profit.” But the total real income of the people of such a society will vary, not only according to how hard they work, but as well according to how effectively they, with their capital and natural resources, are organized and directed in their work. The difference between such a situation and what we find under individual enterprise would be, not that we have the function of enterprisers performed in the one case and not in the other, but that under communism the function is performed by individuals acting in the capacity of govern-

*The function of enterpriser is essential to organized production and must be paid for in profit or equivalent.*

*Even in an isolated family the function of enterpriser would be found, with its contribution to common well-being.*

*In a communist society government agents act as enterprisers.*

*The systems differ in (1) efficiency of enterprisers and (2) ownership and distribution of payment for successful enterprise.*

*Private enterprise assures greater efficiency because of directness of motivation and superior flexibility.*

*Responsibility for decisions and economic reward or penalty should not be separated.*

*The connection between making decisions and taking personal responsibility for their effects is very tenuous in*

ment agents, whereas under a system of individual enterprise it is performed by individuals acting in the capacity of private persons.

There would be two other differences also, in so far as enterprisers are concerned, between communism — or any kind of statism — and individual enterprise: (1) in the efficiency or expertness with which the work is done; (2) in the ownership and distribution of the payment for the services thus performed.

### *Efficiency of Private vs. Communistic Enterprise*

As to the first of these questions, it may be said that both the historical record and the logic of the case indicate that the function of the enterpriser is more efficiently and more expertly performed under a system of individual enterprise than under any other type of economic organization yet devised. This historical record is discussed in Chap. XVII and so need not concern us at the moment. Let us consider, therefore, the logical reason why individual enterprise is so superior in this particular. The subject may be discussed under two general heads: (1) directness of motivation and (2) flexibility in functioning.

1. *Motivation.* Always, under any system of industrial organization, some particular individual must make the final decision as to the way production shall be organized and directed. Obviously, in order to have the keenest incentive to activity in such matters, this individual should be the point at which the rewards and costs involved focus. That is, the individual who has the ultimate responsibility for such decisions should be the one to receive the economic reward, varying according to the success of his decisions, or to suffer an economic penalty in the form of losses for errors of judgment.

Under communism, or any form of statism, this is not possible. It is not the government that makes the decisions, it is individuals acting as government agents. And it is neither these individuals nor the government, but the public which directly benefits or suffers economically from the decisions. Under communism or statism, therefore, the connection between those making decisions and those who enjoy or suffer the consequences of such decisions is about



as tenuous as it is possible to be — more tenuous, it may be noted, than is the case in even the largest corporation. Thus, whatever may be said against absentee management or absentee enterprisers in corporations applies with much greater force to communism or statism. Furthermore, in a system of individual enterprise the enterpriser cannot escape personal recognition of his successes and his failures. Nor can he escape the responsibility for them, regardless of how much he may have delegated the management to others. Therefore he has but one remedial process; namely, to correct such blunders as he may have made and attempt to make sure that they are not repeated. A political agent, in contrast, is not faced with such equally direct and recognizable responsibility for blunders and in consequence is not under the same compulsion to take remedial action.

Finally, individuals as such, as contrasted to "government," are the only ones who can experience one of the real costs involved in enterprise — the worry that attends business responsibility. And it perhaps goes without saying that unless those who can feel and be influenced by such costs are the ones who perform the functions with which the costs are associated, there can be little hope that productive operations will be guided with reference to the net balance between such costs and the resulting product. Where there is not this direct association between results of decisions and the welfare of those making the decisions, it is almost certain that considerations of political advantage and prestige will play a part, and this inevitably results in a loss of efficiency and economic waste.

2. *Flexibility.* The advantage that individual enterprise has in regard to flexibility and elasticity is that, under no other system has there ever been, or is there likely to be, so much experimentation in the development of new products and new methods.

In the first place, a condition of free individual initiative has the effect of creating a strong tendency to try all possible experiments in production and distribution which may result in profit. In consequence, if free enterprisers are allowed to try to make a profit in any legitimate manner, each newcomer will have an interest in seeking new and improved ways to that end.

*public enterprise.*

*In private business, more than in public business, those who make decisions are personally concerned with costs.*

*More freedom to experiment makes private enterprise more flexible.*

*Free individual initiative and free quest of profit spur improvement in production and distribution.*

*A free market assures continuous adjustment of enterprise to public wants.*

*Profit of enterprisers depends on making the adjustments the market requires.*

*The driving force of competition in a free market does not operate in a communistic or government-dominated economy.*

In the second place, only through a system of individual enterprise can we have continuous adjustment of production to the desires of the public. This adjustment takes place through the market and is never-ending, because in a system of individual enterprise the simplest and most direct way for a businessman to make a profit is to find where the demand is great in relation to the existing supply. Under statism this automatic market adjustment must inevitably give way to bureaucratic "planning" and coercion.

In other words, in a system of individual enterprise a constant cleansing process goes on as a result of competition. The organization which fails to keep pace with its competitor loses its ability to operate at a profit — in the technical language of economics, it becomes submarginal — and must either reorganize and regain its relative productive efficiency or go out of business. To those enterprisers thus driven to the wall — and there are thousands of them every year in the United States — this may appear to be a cruel, ruthless process. And so it is in many respects. But more important is the fact that by this process cash investments are realistically adjusted to actualities. This may wipe out the investment of the enterprisers, and in extreme cases it may almost overnight destroy the results of years at hard work. But for society as a whole this process is one of continuous gain. It keeps producers on their toes and, through placing a premium on efficiency, assures that, although temporarily the discoverer of a new or better productive process may enjoy increased profit, in the long run the public benefits by every such improvement.

Under communism or statism, in contrast, there is no such constant cleansing of the economic system. As pointed out above, under such an economic system there is not that driving incentive on the part of each businessman to improve his production which we find in a system of individual enterprise. Under any form of statism if a person discovers a new or better productive process, it does not mean increased profit for him. And whether he even keeps up with other producers in his field is not, as it is in the case of individual enterprise, a matter of economic

life or death. Whether his firm continues to exist will depend, not upon its ability to make a profit through efficiently producing something which the public wants, but upon the decision of a bureaucratic "planning board." Under such circumstances there will be some improvements in production, of course, for man always prefers to do things in the easiest possible way. But such improvements will be small compared with those which take place under the driving force of competition in a system of individual enterprise.

### *Comparative Benefits in Distribution of Profit*

The final difference which may be noted between a system of communism and a system of individual enterprise is in the ownership and distribution of the income, or, to put the issue more plainly, the ownership and distribution of profit. Under communism such "profit" accrues to the state, and thus theoretically belongs to the people as a whole and is used for their collective benefit. Under individual enterprise the profit goes to the individual enterprisers and is used in such ways as they see fit. Which situation contributes more to the general well-being of the public at large?

Unquestionably under otherwise identical conditions the system of private profit contributes more. In the first place, there is a larger volume of profit under individual enterprise, because, as we have just seen, the function of enterprisers is more efficiently and more expertly handled. That means that production is greater — that there are more goods and services available.

Second, under individual enterprise, even though it is true that, in the first instance, the profit belongs to the private enterprisers, actually we all get the benefit of such profit just as truly as we could in any communistic organization. The reason will be evident if one stops to consider what a private enterpriser can do with any profit he makes. Obviously, if he is to gain any benefit from it, the profit must be invested or spent. In either case it creates jobs and leads to further production — thereby adding to our general welfare. And that obviously is as much as can be done by the directors of a communistic society. Furthermore, we

*Hence economic life or death is not at stake to compel efficiency and response to public wants.*

*Which method of distribution of profit contributes most to public well-being?*

*Private profit system makes more goods and services available.*

*Private enterprisers must invest or spend their profits — in either case creating jobs and furthering production. And new production so stimulated will be*



*of what public wants most, not of what is directed by public authority.*

*Accumulation of fortunes under private profit system need not be feared if competition is kept free.*

*For fortunes are dissipated if not invested to meet public wants efficiently in a competitive market.*

*Statistics of business earnings, in spite of*

may be sure that such reinvestment of profit will be more to our liking under individual enterprise than under communism. The reason, as has been stated earlier, is that under individual enterprise the motivating force will be the making of more profit, and that can be done only if something is produced or some service is performed for which we as free individuals are willing to pay. Under communism any reinvestment of "profit" will be for the purpose of producing what those in control think the public should have, not what the public shows through its demand in free markets that it would prefer to have.

But, granting all this, is it not possible that through a system of private profit we may get such great accumulations of private wealth that our welfare is endangered? There is no danger whatever of this if the economic system is kept on a competitive basis. The proper course to follow, therefore, is not to destroy the system of private profit and thereby eliminate the incentive which assures that our abilities and resources will be used for the maximum benefit of society as a whole, but to make certain that we prevent the development and misuse of monopolistic power through which it becomes possible for those in control to protect themselves from the driving force of competition. If that is done, we need have no fear of the accumulation of wealth through the making of profit. Certain individuals, it is true, may amass large fortunes, but to benefit from such fortunes they must keep them invested. If such investment is to yield an income, it must be, under a competitive economic system, in concerns which meet a demand of the public as efficiently as anyone else is able to do. If they cannot meet this standard — that is, if this amassed fortune is not used to the productive advantage of society as a whole as reflected in the market — it will soon be dissipated, through the process of being eaten away by the accumulated losses which result from not being able efficiently to meet a public demand.

## V. THE RECORD OF BUSINESS EARNINGS IN AMERICA

Statistics on the earnings of business in the United States are far from satisfactory in many respects. Until the introduction of the income tax and consequent filing of

returns, it was not possible to get anything approximating an over-all picture. And even with these returns the data leave much to be desired. They are reasonably complete for corporations in the sense that each corporation is required to file an income-tax return with the Bureau of Internal Revenue. But differences between corporations in accounting procedures, in depreciation allowances, in methods of carrying inventories, in charges made to current rather than capital account, etc. necessarily lessen the usefulness of the statistics.<sup>1</sup> In spite of these shortcomings, however, the statistics are worthy of review and study, for they reveal at least three facts of utmost importance—facts which are quite contrary to views widely held by the public at present.

### *Earnings of Corporate Business as a Whole*

The first of these facts relates to the earnings of corporate business as a whole. Many people apparently have the opinion that, although in times of depression business corporations may not have much in the way of profit, in ordinary times they enjoy a prosperity not equaled by any other segment of our economy. Actually, even in the best of years, the over-all earnings of such concerns are not large in terms of either total assets or net worth. During the 13-year period 1927–1939, manufacturing corporations as a whole earned an average of 4.3 per cent on their combined net worth or book value of equity capital. The corresponding average measured against corporate assets was only 2.7 per cent for the same period. The complete record is given in Table 1.

<sup>1</sup> It is sometimes charged, too, that corporations do not write off their plant, equipment, good will, etc. rapidly enough, with the result that their financial statements overstate their real capital investment position and thus understate their profits when expressed as a percentage of capital investment. Although this unquestionably has been true in some instances, there is no evidence to indicate that it is generally true for our corporate business structure as a whole.

*incompleteness, reveal facts which controvert views widely held on this subject.*

*1. Over-all earnings of corporate business as a whole, even in the best of years, have not been large in proportion to either total assets or net worth.*

TABLE 1.—RATE OF RETURN OF ALL MANUFACTURING CORPORATIONS

(Money figures in millions of dollars)

Year	Total assets less invest- ments <sup>1</sup>	Net worth <sup>2</sup>	Profits A <sup>3</sup>	Profits B <sup>4</sup>	Per cent earned	
					On total assets	On ne- worth
1927	\$56,792	\$46,273	\$2,580	\$3,050	4.5	6.6
1928	57,622	48,050	3,366	3,935	5.8	8.2
1929	60,063	50,017	3,862	4,537	6.4	9.1
3-yr. average	58,159	48,113	3,269	3,841	5.6	8.0
1930	59,986	52,695	801	1,424	1.3	2.7
1931	55,747	52,122	— 988	— 521	—1.8	—1.0
1932	50,271	47,640	—1,906	—1,616	—3.8	—3.4
1933	47,177	43,976	— 3	237	0.0	0.5
1934	44,955	43,342	714	1,166	1.6	2.7
5-yr. average	51,627	47,95	— 276	138	—0.	0.3
1935	43,178	38,152	1,460	2,122	3.4	5.6
1936	44,451	37,611	2,530	3,116	5.7	8.3
1937	46,128	38,467	2,416	,069	5.2	8.0
1938	45,634	41,239	727	1,228	1.6	3.0
1939	47,467	41,260	2,432	2,946	5.1	7.1
5-yr. average	45,372	39,346	1,913	2,496	4.2	6.3
13-yr. average	50,729	44,680	1,384	1,899	2.7	4.3

<sup>1</sup> National Industrial Conference Board. Excludes investment in government and other securities.<sup>2</sup> National City Bank. Includes some duplication due to intercorporate holdings.<sup>3</sup> National Industrial Conference Board. Excludes all dividends received, and interest on government securities.<sup>4</sup> National City Bank. Includes intercorporate dividends for comparison with net worth.

### Profits vs. Losses

*2. Never more than three out of five corporations, except in wartime, have any net earnings at all.*

The second important point clearly shown by available statistics relates to the percentage of business firms which make a profit at all. Everyone knows, of course, that at any given time some business firms operate at a loss. The public at large, however, it appears safe to say, has no conception of what a large percentage such organizations are of the total. The best figures available on this again are the data for corporations. They show that in every year between 1913 and 1940, except during World War I (1916-1919), at least 40 per cent of our corpora-



tions showed no net income, and in 1932 almost 84 per cent showed no net income. In other words, except in war-times, never more than three out of every five business corporations have any net earnings, and in all but the most prosperous years never more than two out of every five have net earnings. The record year by year since 1913 is given in Table 2.

TABLE 2.—CORPORATION RETURNS WITH NET INCOME AND WITH NO NET INCOME<sup>1</sup>

Year	Total returns, thousands of corporations <sup>2</sup>	Returns with net income, thousands of corporations	Returns with net income per cent of total reporting corporations
1913	317	189	59.6
1914	299	174	58.2
1915	366	191	52.1
1916	341	207	60.7
1917	351	232	66.1
1918	313	202	63.5
1919	320	210	65.5
1920	346	203	58.8
1921	356	171	48.0
1922	383	213	55.6
1923	399	233	58.4
1924 <sup>3</sup>	417	236	56.6
1925	430	252	58.6
1926	455	258	56.7
1927	475	260	54.7
1928	496	269	54.2
1929	509	269	52.8
1930	519	221	42.6
1931	516	176	34.1
1932	509	83	16.3
1933	504	110	21.8
1934 <sup>1</sup>	529	145	27.4
1935	534	164	30.7
1936	531	203	38.2
1937	529	192	36.3
1938	521	170	32.6
1939	516	199	38.7
1940	512	221	43.2

<sup>1</sup> From *Statistics of Income*, U. S. Treasury.

<sup>2</sup> Includes inactive corporations.

<sup>3</sup> Includes fiscal year returns from here on.

<sup>4</sup> Not strictly comparable from here on with earlier data, owing to limitation of privilege of filing consolidated returns.

Percentages computed by the N.A.M.

*Relation of Size to Earnings*

The final point which is especially worthy of comment in connection with business profit is the relation of the size of the business unit to the rate of profit or earnings realized.

Offhand it is probable that most persons not familiar with the record would say that the rate of profit varies more or less directly with the size of the business organization. They would recognize that unquestionably there are many exceptions to this rule — many cases where small companies make a higher rate of profit than do the larger companies. But in the general public's mind these are just the exceptions; hence the popularity of campaigns to "soak" the large organizations.

*3. Among profit-making companies, the smaller corporations have a higher rate of profit than the larger ones.*

The record shows, however, that this public conception is completely wrong. Taking all corporations which reported a net income, and for the moment ignoring those which reported a net loss, we find that those with total assets of between \$1,000 and \$50,000 had a higher rate of profit than those between \$50,000 and \$100,000; that those between \$50,000 and \$100,000 had a higher rate of profit than those between \$100,000 and \$250,000; and so forth up the scale. As Table 3 shows, this rule held true in almost every case between 1931 and 1939, regardless of fluctuations in the level of general business activity.<sup>1</sup>

<sup>1</sup> It should be kept in mind in analyzing Table 3, and also Tables 4 and 5, that the figures given are general averages of many thousands of companies and as such do not reveal the great variations which exist between different types of business. For example, there is a wide variation between the manufacturers of durable and nondurable goods, between those manufacturers who make standardized low-cost products and those who make large high-cost units involving a long period of fabrication. Also public utilities, which are a highly regulated industry, tend to have fairly uniform rates of profit. Again, the pattern of earnings of companies in wholesale and retail trade and in finance differs quite sharply from that of manufacturing companies and public utilities.

TABLE 3.—EARNINGS IN RELATION TO SIZE OF ORGANIZATION<sup>1</sup>  
(All corporations with net income)

Total assets, thousands of dollars	Earnings as a per cent of net worth								
	1931	1932	1933	1934	1935	1936	1937	1938	1939
1— 50	11.4	8.4	8.5	10.5	10.9	12.8	12.9	10.8	11.8
50— 100	7.6	6.0	6.8	8.6	9.3	10.2	9.8	8.3	9.6
100— 250	6.8	5.8	6.8	8.2	8.9	9.8	9.2	7.8	9.1
250— 500	6.5	5.8	6.9	8.0	8.7	9.2	8.7	7.1	8.6
500— 1,000	6.1	5.5	6.7	7.7	8.6	8.8	8.1	6.8	8.1
1,000— 5,000	5.8	5.0	6.3	6.8	7.7	7.7	7.3	5.8	7.3
5,000—10,000	6.2	5.1	5.9	6.4	6.8	6.7	6.1	4.9	6.4
10,000—50,000	5.8	5.0	5.7	5.8	6.8	6.1	6.1	4.8	6.1
50,000 and over	5.0	4.0	3.7	3.8	4.0	3.5	3.5	2.8	4.7

<sup>1</sup> Computed from *Statistics of Income*, U. S. Treasury. The figures are for earnings after the payment of taxes. This also is true for Tables 4 and 5.

Likewise it is true, as Table 4 shows, that as a general rule, in the case of corporations reporting a loss, the smaller the company the larger the percentage of loss. This is as would be expected. Ordinarily if one has a new idea he risks no more capital than is necessary to try it out. The same is true if one is organizing a new company in a well-established field.

On the whole, therefore, in the lower categories there is a larger percentage of new companies, and this inevitably makes for a larger percentage of losses. This does not mean that the larger companies do not constantly try new ideas which result in loss. Of course they do. But in these instances such new experiments ordinarily represent only a part of their total operations. Any resulting losses, therefore, are offset to a greater or lesser extent by earnings from their other activities.

*And among corporations with no net earnings, the smaller ones have the larger percentage of loss.*



TABLE 4.—LOSSES IN RELATION TO SIZE OF ORGANIZATION<sup>1</sup>  
(All corporations with no net income)

Total assets, thousands of dollars	Net losses as a per cent of net worth								
	1931	1932	1933	1934	1935	1936	1937	1938	1939
1- 50	52.4	46.7	37.9	40.6	38.2	41.1	41.8	43.8	49.8
50- 100	23.3	21.0	14.6	13.8	12.7	13.9	13.6	14.5	14.9
100- 250	17.6	15.7	11.9	11.0	10.5	10.9	11.2	11.5	11.2
250- 500	13.8	12.8	10.2	9.3	8.4	9.1	9.5	9.0	9.6
500- 1,000	11.6	11.6	8.9	8.5	8.1	9.5	8.9	8.5	9.1
1,000- 5,000	10.0	9.4	8.3	6.6	6.5	7.7	7.3	6.6	6.7
5,000-10,000	9.0	9.6	8.6	6.7	5.4	6.5	7.1	6.3	6.9
10,000-50,000	7.7	7.7	7.9	4.4	4.0	7.2	5.7	4.9	4.6
50,000 and over	3.1	3.5	2.7	2.1	1.5	2.8	3.5	4.6	3.8

<sup>1</sup> Computed from *Statistics of Income*, U. S. Treasury.

*Over-all earnings of smaller corporations in relation to net worth are lower because of the losses of small unprofitable companies.*

It may be interesting to combine the basic data from which Tables 3 and 4 are compiled and give the record for all corporations together; that is, to combine the record of those which show a profit with those which show a loss. When this is done, we find that the over-all earnings of smaller companies in relation to net worth are lower than those of large companies. This is true because a larger proportion of small companies report no net income and because losses of small unprofitable companies are relatively larger. The combined figures are given in Table 5.

TABLE 5.—PROFIT OR LOSS OF ALL CORPORATIONS BY SIZE OF ORGANIZATION<sup>1</sup>  
(All corporations submitting balance sheets)

Total assets, thousands of dollars	Net profit or loss as a per cent of net worth								
	1931	1932	1933	1934	1935	1936	1937	1938	1939
1- 50	-21.9	-33.0	-20.8	-14.9	-11.2	-6.6	-8.6	-13.4	-8.5
50- 100	- 9.1	-14.0	- 6.2	- 2.3	- 0.6	+2.4	+1.5	- 1.3	+1.8
100- 250	- 6.6	- 9.9	- 4.2	- 0.9	- 1.2	+4.2	+3.4	+ 0.8	+4.0
250- 500	- 4.8	- 7.4	- 2.9	0.0	+ 2.2	+5.0	+4.3	+ 1.8	+4.8
500- 1,000	- 4.2	- 6.6	- 2.1	+ 0.3	+ 2.2	+5.1	+4.4	+ 2.2	+4.8
1,000- 5,000	- 3.6	- 5.2	- 2.1	+ 0.6	+ 2.3	+5.1	+4.7	+ 2.4	+5.3
5,000-10,000	- 2.6	- 4.7	- 2.1	+ 0.5	+ 2.0	+4.9	+4.4	+ 2.4	+5.1
10,000-50,000	- 1.5	- 3.3	- 1.3	+ 1.5	+ 3.0	+4.7	+5.2	+ 3.0	+5.4
50,000 and over	+ 0.7	- 0.6	+ 0.3	+ 1.0	+ 1.7	+3.0	+3.0	+ 1.6	+3.1

<sup>1</sup> Computed from *Statistics of Income*, U. S. Treasury.

## *The Cost of Payment for Enterprise*

In conclusion, let us return to the question of how much the function performed by our enterprisers is worth. In our earlier discussion of this, we said in effect that it is worth no more than the minimum amount which has to be paid to get the job done, and that the most satisfactory and most accurate means for determining this is by competition. We are now in a position to carry the analysis one step further and answer the question in terms of how much it actually has cost us to have the function of enterprise performed.

First, let us be sure we have the magnitude of the job we are discussing clearly in mind. We have in the United States about 500,000 corporations. In each business corporation there is an enterpriser—a person or group of persons<sup>1</sup>—who has invested money and accepted all the uninsurable risks incident to being in business—risks which may result in losses that not only keep him from getting any return on the savings he has invested and any pay for the work he does, but as well may completely wipe out all that he has put into the concern. All told, the amount of savings currently being thus ventured amounts to some 140 billion dollars.<sup>2</sup> That, if you please, is the fund with which these half-million corporate enterprisers are guaranteeing to make good any losses that may be incurred in their business operations. That is the fund—the equity—with which these half-million corporate enterprisers currently are backing up their confidence in their ability to produce something or perform some service which the American public wants and to do it at a price which the public is willing to pay and still leave a profit for themselves.

That so many persons constantly are willing to risk their savings in this manner is a truly amazing social phenomenon. For bear in mind that in a democracy and with

*We can now compute the cost of our payments for enterprise.*

*We have now half a million corporate enterprisers who have responsibility for about 140 billion dollars of investment in enterprise capital.*

*They have to keep this volume of savings*

<sup>1</sup> In line with previous usage, we here consider all the stockholders of a corporation as just one enterpriser. The total number of stockholders in American corporations is estimated as about 10 million.

<sup>2</sup> Technically, this is the net worth of these business organizations. Of course it does not include the billions upon billions of dollars which have been lost in unsuccessful ventures in the past.

*at work in a competitive economy.*

*The competition is not only with goods or services of similar sort, but also with all goods and services consumers are free to buy.*

free markets there is no compulsion that they can use. They simply have to offer the goods or services of their organizations and hope that they can get the public to prefer them over the thousands of other goods and services which other enterprisers are offering simultaneously. And even if they succeed and get a market for their wares, there is still no rest. The following week another product may appear which the public likes even better, or the identical product may be offered at a price with which it is impossible to compete.

In brief, the risk that each of these half-million corporate enterprisers takes is never ended. For each enterpriser, if we think of the stockholders of each corporation as a single enterpriser, is competing not just for that portion of the public's dollars which "normally" is spent for his product. He is competing also to keep the producers of some entirely different article from getting the public to change its spending habits and so leave him and his immediate competitors with only a fraction of their existing market or perhaps without any market at all. It is not simply that he must produce as good an automobile as the other automobile manufacturer; he must also produce an automobile which the public will continue to buy in spite of anything that the airplane industry may offer, or the building industry may offer in the way of new homes, or the furniture industry may offer, or the electric-refrigeration, or washing-machine, or radio industries may offer. He must even produce an automobile, if he is to continue making a profit, that the public will keep on buying in spite of how high taxes may go or how low the national income may fall.

Such is the problem of the enterpriser—of the half-million corporate business enterprisers in this country—each of whom as an individual could have escaped this risk by investing his savings in government securities or other high-grade bonds. Instead they have preferred to become enterprisers, and, in the aggregate, are putting up 140 billion dollars of their own money to back their conviction that they can meet this test. How much, actually, has it cost us to get these persons to take this risk?

We noted in Table 1 that for the 13 years 1927



through 1939 the average profit on net worth in all manufacturing corporations was 4.3 per cent. But those 13 years included several years of depression and several more of substantially less than full recovery. For the present purpose, therefore, let us limit our consideration to the 3 years 1927 through 1929—years of general prosperity and full employment. During those years the average profit for all manufacturing corporations was approximately 8 per cent. That, then, may be taken as the gross price we actually paid during that period to get the function of enterprise performed in these business organizations.

But note that we say that was the gross price. The actual net price is something quite different. This is because each of these enterprisers, or more properly each of the stockholders in these corporations, had the constant choice as an individual of withdrawing from the risks of an enterpriser and investing his capital in government securities and high-grade corporate bonds. Had he done so he would have received on the average during those 3 years about 4 per cent on his money. The real "bonus" he received as an enterpriser, therefore, or the "premium" he received for foregoing the relative safety of such investments and accepting his proportionate share of the risks and responsibilities of a corporate enterpriser, was the difference between 4 and 8, or 4 per cent. That, if we take manufacturing corporations as typical of business organizations as a whole, was the premium society paid for having the function of enterprise performed between 1925 and 1929—years when business was generally considered to be exceptionally prosperous and when enterprisers would justly expect compensation for small returns or losses in poor years.

### *Why We Get So Much Enterprise at Low Cost*

So much for the over-all picture of what enterprise costs. Would a person give up the security of high-grade bonds and take the risk of an enterpriser for a differential not large in the most prosperous years and much less in other years—indeed becoming a negative figure as it did in depression? Certainly society is fortunate to get the job of an enterpriser done at such a low and fluctuating cost. We get it

*In manufacturing, the average profit on capital invested during the 3 prosperous years 1927-1929 was about 8 per cent.*

*While this was the gross price actually paid for enterprise in that field, the net price was much less—the excess above yield on high-grade bonds.*

*Even in those years only 4 per cent was the premium paid by society for performing the function of enterprise.*

*We get this service at so low a cost because we do not normally limit profit.*

*Each enter-  
priser hopes for  
above-average  
returns, though  
two out of five  
get none at all.*

*To keep that  
hope alive is the  
key to continu-  
ance of our  
enterprise sys-  
tem — and also  
our freedom.*

done because we do not limit profit and because each enterpriser believes or hopes when he undertakes a venture that his return will be much larger than this average—that he will make 10, 20, 30, or even 100 per cent on his investment. That most of these hopes are never realized goes without saying. As we have pointed out before, and as shown on page 472, even in the best of peacetime years at least two out of every five of our enterprisers make no profit at all. But, as long as the hope is kept alive, they, or others like them, will try again.

The crucial point, then, in the relation of profit to the enterprise system is to make sure that this hope is kept alive. What this means in the way of public policy is too broad a problem to discuss in detail here. It involves the whole question of taxation and the relation of government to business—both of which are analyzed elsewhere. For the present, therefore, it must suffice to say that destruction of the hope and possibility of large profit means nothing less than destruction of the enterprise system, and destruction of the enterprise system means the destruction of political freedom. Profit, the price of enterprise, is equally the price of liberty.

NOTE. — The importance of profits "plowed back" into a business — to meet the requirements of the market, to create more jobs, and to serve the interest of all concerned in the continuance and progress of the enterprise — has been discussed in Chaps. VIII and XV.

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## X

# THE ROLE OF PRICES AND PRICE DETERMINATION

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### PART I

IN discussion of prices and the process of price determination, one central feature is so obvious that it is sometimes passed over without a realization of its great significance in the functioning of the enterprise system. That feature is the continuous exercise of choice by the buyer and the seller—whether or not to buy or sell at all, whether to do it now or later, and whether or not to accept the proposed price. The shopping district of any American city in peacetime presents each day thousands of instances of this free choice being exercised. Additional instances involving construction, factory machinery and equipment, and real estate are occurring behind the scenes.

As a result of these free choices, exercised every day by millions of members of the community, decisions are made almost automatically as to what shall be produced, how much shall be paid to the different agents of production, and how the natural resources and labor supply of the country shall be utilized. The free market is a necessary instrumentality of a free society. Although this chapter deals primarily with the prices of commodities and of services sold by business concerns, much of the argument is equally applicable to wage rates as the price of labor and to interest as the price paid for the use of lendable funds. It would complicate the discussion unduly to develop, through each phase, the modifications that would make each general statement about prices apply to wage and interest rates.

It would, of course, be possible to set up economic systems in which the individual no longer makes choices. Every purchase of every individual would be directed by some central agency, or by a rigid social code, embodying

*What gives price determination outstanding significance in the enterprise system is the continuous exercise of choice by buyer and seller.*

*Free choices, exercised daily by millions, determine what shall be produced, how much shall be paid the producers, how the natural resources and labor supply shall be used.*

*It would be possible for all individual purchases to be*



*controlled by a central agency or rigid code; also all production.*

inherited privileges, with directions specifying what should be bought, the time of purchase, the price to be paid, and the seller. Similarly, the production and sales of every individual and every concern would be directed, with directions specifying the total amount to be produced and sold in any period, the prices at which sales are to be made, and the individuals or concerns who may buy.

*Such control of relations among producers, employees, and customers would not satisfy people's wants, would destroy incentive, and slow progress.*

Such directions characterized feudal society and are now to be found occasionally in primitive groups; but no one has seriously proposed, except as a wartime expedient, replacing our present system entirely by any such directed system. There is general appreciation of the wastes and dangers inherent in any centralized and rigid system; for instance, inertia and political favoritism. Above all, if coercion should be substituted for bargaining in determining the relation among producers, employees, and customers, most people would usually not get what they wanted most, there would be little incentive for them to put forth their best efforts, and progress would be much slower because new ideas would have to win approval from a single politically selected central agency, rather than from the independent choices of millions of citizens.

*Since proposed changes in our free system would reduce freedom of choice, we are analyzing the workings of the free price system to show far-reaching effects of restricting flow of materials and labor.*

Although no one now advocates completely replacing our present free system by a completely directed system, certain changes in the system have been proposed which would substantially reduce the freedom of choice of buyer or seller. It would seem appropriate, therefore, to analyze the workings of the free price system, in order to bring out just what this freedom of choice accomplishes in directing the flow of material resources and personal efforts. This analysis shows that any restrictions in the free functioning of the price system would have far-reaching effects. They would direct the flow of materials and labor into different channels than would be followed in a free economy, tending on the whole to diminish the magnitude of the flow and to reduce the extent to which people's real desires are satisfied.

## OUR ECONOMY CHARACTERIZED BY CONTINUAL CHANGE

The first point to be noted in this analysis of our present system is that it is characterized by continual

change and readjustment. Even though a price correctly reflected yesterday all supply-and-demand conditions affecting a given product, the same price cannot be expected to be necessarily the right price today in view of the changes which have occurred since yesterday. There may have been introduced new competitive products, new sources of supply, new methods of production and distribution, new uses or expansion of old uses; and, as is often more important than actual physical developments, there may have been a change in the attitude of possible users of the product so that its relative desirability as compared with other goods is larger or smaller than it was.

In view of the great changes that have occurred in this country in the past thirty or forty years, it is obviously unsound to assume that prices or price relations today should be the same as at some earlier date. In particular, the legally favored position of so-called "parity" prices does not rest on any economic principle. It was established despite the well-known tendency of production costs of goods adaptable to large-scale or mass production methods to decline more than costs of goods of individual or frequently changed design.

#### PRICES A KEY ELEMENT IN ADJUSTMENT OF ECONOMY

The second point, the central point in this analysis, is that prices are the key element of the mechanism by which adjustment is made between the changing preferences of the public for various goods and services and the time, effort, and resources required to produce those goods and services.

A growing demand for a particular product tends at first to raise its price, if there is no increase in the supply, and to maintain its price in the face of an increasing supply. The result is that greater resources are devoted to the production of the product. Then, normally, competition results in lower prices than would otherwise exist. A decreasing demand for a particular product tends to lower the price and, if prolonged, forces some producers to consider shifting their efforts to other products. In either case, changes in preferences are reflected in actual or expected price changes, and hence lead to a new adjustment.

*One feature of the present system is continual change and readjustment.*

*Prices and price relations must vary with changes of relevant factors.*

*And prices are the chief means of adjustment between changing preferences of consumers and time, effort, and resources required for production.*

*Growing or declining demand affects prices, and price changes lead to other adjustments.*

*Likewise changes in costs of production bring adjustments.*

Similarly, if because of improved technology, or other causes, a smaller expenditure of time, effort, and resources is required per unit of product and a reduction of price is thereby made possible and is put into effect, this lower price may induce purchases of that product by people whose preference for it had been insufficient to cause them to buy it at the higher price. Hence the resources devoted to that line of production will be increased. An improvement in quality without a change in price per unit may have an effect on demand equivalent to a reduction in price without a change in quality.

On the other hand, if in the case of some commodity or service the raw materials or labor required in production and distribution has become more expensive, and these cost increases have not been offset by technological improvements, the price previously established as satisfactory to both producer and consumer will no longer compensate the producers. Some of them will then withdraw from this line unless it is practicable to raise the price. If the price is raised, some former purchasers may shift to something else. In either event a smaller amount of effort and resources will be devoted to that line of production.

*In so far as the test of the market is not accepted, the flow of goods and services is reduced.*

The discussion so far has assumed that prices are sensitive to changes in demand or supply. It is true, to be sure, that the preceding description of the operations of the price system does not apply if either buyer or seller persists in trying to impose a price not satisfactory to the other people involved. In such a case, some of these other people divert their efforts or interest to other lines and the flow of goods from producer to consumer is much less than it would be if a mutually acceptable price were arranged. Under such circumstances, the price mechanism functions to curtail the sphere of activity of those who do not accept the test of the market place.

### *The Price System as an Instrument of Democracy*

*The functioning of a free market is a chief instru-*

The system of determination of prices by the functioning of a free market is thus a chief instrument of economic democracy. Every member of the economy is continually casting votes—in favor of commodity A rather



than commodity *B*, or any other alternative; in favor of one manufacturer or distributor and against all other rivals; against a particular price for some commodity today and perhaps in favor of that same price under different circumstances tomorrow. These votes are influenced, it is true, by the campaigning of the candidates—aggressive salesmanship which sometimes creates in people desires which they did not know they had and more frequently changes the relative rank of their desires.

From the point of view of the other side of the bargaining, many members of the economy as producers vote for or against continuing production at the price level that others are willing to pay, or vote in favor of selling at the price offered, or holding commodities already produced, or vote for or against creating new productive facilities.

It is the votes of individual consumers and producers, in other words their choices among the various goods and services they can buy or produce, that constitute the warp and the woof of the economic fabric.

This system attaches primary importance to the worth of the individual human being and affords him greater opportunity than does any other system to develop along the lines he selects for himself. It is thus in accord with the basic principle that underlies democracy and is contrasted with other systems according to which some central authority, or supposedly wiser individual, selects for each person what commodities and services he shall get for his own use, what he shall do for a living, and what relative importance he shall attach to the different things he might get or do.

### *The Price System as an Efficient Regulator of Production and Distribution*

The automatic functioning of the price system, with its flexible differentials between prices in different localities and at different stages of the productive process, is one of the factors responsible for providing people with each commodity that they want most, where they want it, and in the desired amounts. It is impossible to imagine a central agency that could fix prices with such satisfactory results anywhere near as promptly and as smoothly, in

*ment of economic democracy.*

*The votes of individual consumers and producers, in their economic choices, are woven into our economic fabric.*

*Individual choice is contrasted with centralized control.*

*The automatic functioning of the price system has maintained a flow of goods with notable efficiency.*

*Though never functioning perfectly, no other system assures equal satisfaction.*

*Our system also encourages continuous progress.*

*As long as a substantial number want a product, it continues to be produced; but the market is always open to new in-*

view of the hundreds of thousands of items and the thousands of localities that would have to be taken into account in such "central planning." If we were not so accustomed to it, we should recognize how remarkable it is that, through the reactions of millions of people day by day to individual situations, the flow of goods is maintained with such a high degree of smoothness and general satisfaction.

It is not intended to imply that every actual price or price differential is the best that could be established, but merely that on the whole the system functions far better than could be expected from any other general procedure. The details of our present system are open to improvement through making fuller information more generally available, greater flexibility in price decisions, and perhaps in some cases a greater willingness to price on the basis of long-run effects rather than the immediate situation.

### *The Price System as an Instrument of Progress*

Another advantage of our system of price determination, as compared with a system of central direction, is that it encourages progress through the creation of new products and the selection for continuance of those that are voted most desirable by the free choices of consumers. In order to win votes in the market place, the candidates (that is, the backers of various products) improve the quality and reduce the cost of the goods they want to sell. The progressive improvement in the American scale of living is due in large part to this combination of salesmanship and research, which creates and calls to public attention better and more varied goods, from which, in the long run, the best are selected for retention.

It is important to note that in the free market a particular product does not have to receive a majority of votes to win. As long as enough people vote in its favor at a high enough price, production can be continued. In contrast, any system in which a new product can be launched only after it secures the approval of some group of bureaucrats or conservative business leaders is likely to discourage new inventions. The contrast between the two systems is evidenced by the number of new inventions which have

established their worth in the really free markets of America and have then been accepted in countries more controlled by convention, habit, and central authority.

*ventions, which flourish most in free markets.*

*Progress Demonstrated by Increased Production of Preferred Goods at Declining Prices*

Characteristically, the price of a new product is relatively high, reflecting the large unit cost of manufacturing and selling an unseasoned article and the relatively limited number of consumers who are willing to use their income for the purchase of an unfamiliar item. If the new product, however, turns out to be one for which preference is expressed by the free choices of a good many consumers, it is standard practice for American businessmen to stimulate demand by reducing the offering price in anticipation of economies which ordinarily result from larger-scale production. In a good many cases, a series of price reductions is made as the use of the product broadens out. In other cases, the nominal price per unit remains substantially unchanged, but the quality of the product is improved. In such cases also the price per equivalent unit, if it could be determined satisfactorily, would show a declining trend. In still other cases, stated price per unit declines and quality also is improved, so that the declining price trend based on recorded prices understates the extent of the real price decline.

*Increased preference of a product leads to increased production and lowered prices or improvements at same prices.*

Several instances of declining price trends associated with increased physical volume of production are shown in accompanying charts of price and production trends for passenger automobiles, household electrical refrigerators, radios, and incandescent lamps (see pp. 42-49).

These examples of declining price trends and increasing volume show how effectively the enterprise system, functioning through the mechanism of the price system, is improving the standard of living.

*Thus the standard of living is progressively raised.*

IMPORTANCE OF COMPETITION IN PRICE  
DETERMINATION

An essential element in the process of adjustment between consumer preference and productive effort is competition between sellers of goods that are acceptable

*Competition is an essential element in ad-*



*justment  
between  
consumers'  
preference  
and produc-  
tive effort.*

*Differences in  
goods and serv-  
ices, as well as  
in prices, are  
important  
factors in  
competition.*

*Quality, serv-  
ice, and price  
are all criteria  
of desirability  
in purchases.*

to purchasers for meeting a particular need, though not necessarily identical. This competition is carried on by such methods as advertising, presentation of the characteristics and relative merits of different products, styling and functional adaptation of product, provision of accessory services, provision for delivery, granting of credit, and adjustment of price. This kind of competition is truly the life of trade and the breeding ground of progress.

Other similar elements in the process of adjustment are the competition between buyers for goods which they desire, especially capital equipment, and the competition between concerns for additional investment funds.

It is to be noted that this discussion recognizes competition by means of differences in the characteristics of the commodity or service. Some economists, it is true, consider that any differences which are unique in a particular product or service make its market "monopolistic" rather than competitive. For instance, the grocer at the next corner is considered to enjoy a monopolistic advantage of location as compared with the grocer three blocks away. Our point of view, however, is that of the ordinary consumer. Practically, everyone regards a rather wide variety of goods as being "competitive" for the purpose of satisfying a given desire; and as a matter of fact in many cases the only reasons for choosing one or the other lie in the differences in characteristics rather than in price differences. Since these differences in characteristics often cannot be measured in any common unit, some logical perfectionists are reluctant to classify such situations as competitive. In this discussion, however, it is insisted that most competition is of this type and that relative desirability is measured through the normal functioning of the free market.

The great importance in competition of factors other than price is most clearly recognized by purchasing agents of large companies, some of whom rank the criteria of desirability in purchases as follows:

1. *Quality.* Does the product serve the purpose intended?
2. *Service.* Will deliveries be made as promised? Can repair parts be obtained promptly? Will the supplier

cooperate wholeheartedly in meeting emergencies?

3. *Price.* Is the price as low as or lower than the price at which a product of satisfactory quality, backed by satisfactory service, can be obtained from other sources?

### *Free-market Prices vs. "Just" or "Fair" Prices*

The most desirable price from the point of view of the effective functioning of the economy is the price which results from competition in the free market, where competition is of the broader type described above and not merely between suppliers and purchasers of exactly the same commodity.

In the case of such prices, moreover, as public-utility rates, where it has been considered best to entrust some sphere of economic activity to regulated enterprise, rates are in effect determined on a modified free-market basis if (a) the expenses of the utility, such as compensation of workers and costs of supplies, are kept in line with similar expenses paid by enterprises in the same locality which are subject to competition, and (b) the return on invested capital is kept in line with the return earned by business enterprises with similar risk factors in the same locality.

Other cases in which the competition of the free market is not the best mechanism for controlling price are of those commodities for which in wartime the normal functioning of competition is impaired or paralyzed. In these cases the test of proper price is usually correspondence of price with what it is at the time the emergency arises or what it has been under previous conditions, or with the price of similar goods, or such a price adjusted upward to cover increased costs. Efforts may also be made to adjust the price to a point which will yield some specified rate or amount of return.

It should be noted at this point that a different terminology is often used in connection with utility rates and war profits; namely, such rates should be "fair" or "just," or result in a "fair return" on the investment. If "fair" is interpreted by comparative statistics, the result of this approach is essentially the modified free-market

*For such regulated enterprises as public utilities, the free market is modified, but is still a factor if costs and return are kept in line with other enterprises of like risk.*

*Nor is the free market without influence on wartime controlled prices.*

*"Fair" prices, in such cases, should be fixed only in relation to comparable situations in the free market.*

price just described. If, however, "fair" is interpreted to be what some commission, administrator, or court thinks without analysis of comparable situations, we have a reversion to the medieval notion of "just" price, which tended to be arbitrary and conventional, subject to change only after pressure of economic forces became too strong to resist and the fixed price therefore tended to prevent improvement and progress. The freedom of business enterprise resulting from the system of determining prices through the competitive mechanism of the great market, rather than by precedent or arbitrary decree, is one of the underlying causes of modern progress.

*Potential Competition and Loss of Customers Restrain Upward Tendency of Prices*

*Upward tendencies in prices are restrained by potential competition, and by the limiting effect of high prices on volume of demand.*

If the price of a product is maintained at a level which results in a very high profit margin, potential competitors may be induced to enter the business and expand the total manufacturing capacity for the product far beyond the demand available at that or even a considerably lower price. The result might be a reduction of profit margins for all producers to or below the vanishing point, as discussed on page 19. This possibility of destructive price competition tends to restrain any concern which finds itself able temporarily to maintain an abnormally high price.

Another consideration, which also tends to restrain a concern from maintaining unduly high prices, arises from the limiting effect of such high prices on the quantities wanted. Although the aggregate profits at the high price level may temporarily be larger, yet it is generally recognized that in the long run the combination of low price, moderate profit margin, and growing volume is more profitable.

PRICES IN GROWING, STABILIZED, AND  
DECLINING INDUSTRIES

*Changes in demand for different goods and services may reflect*

It is characteristic of the American economy that the quantities of different goods and services which the public wants change from year to year. Some of these changes may reflect price changes; but in other cases changes in quantity wanted occur even though the real



price (that is, the price adjusted for changes in general price level) does not change. Anyone can recall, for instance, the period in which sales of automobiles and radio sets showed an upward trend. The demand for most food-stuffs, on the other hand, parallels population growth, while the volume of sales of organs, streetcar transportation (aside from war conditions), and many kinds of cotton goods tends to be smaller each year. Carrying the analysis down to subclasses of products would provide many more illustrations of growing, stabilized, and declining demand. What was all the rage yesterday may be the white elephant of today.

These differences as to growth, stabilization, or decline are responsible for differences in pricing situations, especially in the relation of price to cost, and are analyzed in the following paragraphs. This analysis is concerned with the typical flow of manufacturing production, not with the kinds of products which already exist and have to be sold irrespective of profit. It is important to realize that in this respect manufacturing differs from agriculture and many other lines. The stock of most manufactured goods which is actually on hand at a given time is relatively small compared with annual production.

### *Prices in Growing Industries*

If the quantity of a certain product wanted at the established price tends to increase, producers are likely in the first place to utilize to the full all their manufacturing capacity. If the entire output of existing capacity is still less than the quantity wanted at the established price, producers may try to get a higher price or may consider increasing productive capacity. If there is reason to think that the demand is temporary, the establishment of a higher price may reduce the quantity wanted to existing productive capacity, thus spreading demand over a longer period and avoiding overdevelopment of productive resources. Postponed demand, to be sure, sometimes disappears or turns to substitutes.

If the increase in demand is not believed to be temporary, the increase of additional productive capacity, either by concerns already established or by new concerns,

*price changes, but also, or instead, may reflect other factors.*

*The effect of these other factors on price situations, especially in manufactured goods, will be analyzed.*

*In industries where demand is growing, if increase is believed temporary, a raise in prices may avoid overdevelopment of productive facilities.*

*If the increased demand is expected to con-*

*tinue, increase of productive capacity is likely to follow if expected price will cover costs of more efficient producers and invite the use of more capital.*

*In a healthy economy prices and profits in many lines are adequate to encourage new capital formation.*

is likely to be considered. Producers do not apply effort and resources to the manufacture of a new product, or apply additional effort and resources to improving an old product or increasing the volume of output, unless the expected price is high enough to cover all the costs of at least the more efficient producers (not only the costs of labor and materials directly allocated to the product, but also an appropriate part of overhead cost) and to provide a sufficient return on their investment to enable them to secure additional capital funds in competition with other potential users of such funds.

It is characteristic of a healthy economy that prices and profits in many lines are adequate to encourage new capital formation, which provides not only for growth in population but also for improvement in the scale of living through improving the kind and quality of things produced.

If the existing price is already high enough to provide a satisfactory return, completion of new capacity will be in order; if the existing price is too low to provide such a return, there is a strong tendency for the price to rise, provided that there are no arbitrary or conventional restrictions on price movements.

It is clear, therefore, that the price of a product subject to growing demand tends to be at or above a level enough above full costs to provide an attractive return on investment.

### *Price Levels in Stabilized Industries*

*In an industry where demand is fairly stabilized and productive capacity is adequate, with allowance for normal growth, prices may not include a margin to justify*

In an industry in which productive capacity is adequate to provide the quantity wanted at the established price, with allowance for any expected increase in the number of consumers or the volume of their wants, the margin of price over cost is not necessarily large enough to justify investment in productive facilities, but is typically large enough to cover, for the more efficient producers, not only the cost of the labor and material directly allocated to the product, but also the appropriate part of the company's overhead costs and a "safety minimum" return on investment. This safety minimum return is usually large enough to provide a factor of safety against

the vicissitudes and fluctuations of business and the inevitable errors of estimates; also to offer a return on capital sufficient to bring about such investment, including re-invested depreciation and depletion reserves, as may be required to maintain the capacity of the industry.

If the price is too low to provide this minimum net return, the tendency is to withhold capital from reinvestment in such lines of production, and to withdraw existing resources where possible; thus leading ultimately to reduced production through inadequate replacement, failure of less successful concerns, and diversions of resources to more profitable activities. In such a case a new balance between supply and demand may be reached on a lower scale of output, and possibly at a higher price.

### *Price Levels in Declining Industries*

In the case of manufactured goods in which the demand at the established price level is less than the potential supply or the productive capacity, the price may drop at times to the level of net out-of-pocket costs; that is, to the excess of the cash outlay necessary to produce the product over the outlay that would be necessary if the product were not produced. Prices of perishable goods, or of goods produced substantially in advance of sale, stocks of which exceed immediate demand, may drop considerably below even out-of-pocket costs. Under such conditions there is strong pressure on producers to shift to other lines of activities. It is in accord with the function of prices as the regulator of private profit that prices in such cases should go low enough to force adjustments.

### HOW PRICES FUNCTION IN THE ALLOCATION OF CAPITAL

One important function of prices in the American competitive system is to induce the most effective allocation of capital to the production and distribution of goods. This objective is influenced by the prices of the goods to be produced and distributed, the prices of the facilities with which they are produced and distributed, and the cost of capital needed to pay for the facilities. How this works is outlined below for a broad range of circumstances on the assumption that factors other than those mentioned

*new investment, but should include a "safety minimum."*

*Otherwise reinvestment may not be made or capital may be withdrawn for more profitable use, lowering output and raising prices.*

*In industries with declining demand or oversupply, prices may drop to level of net out-of-pocket costs. This may force adjustments, such as shift to other productive activities.*

*An important function of prices is to induce the most effective allocation of capital to production and distribution.*



*Prices offering a liberal return to invested capital encourage increased output of existing facilities and investment in added facilities.*

*Prices offering a return moderately above that on long-term government bonds encourage conservative expansion.*

*Prices providing earnings at a lower rate may justify maintenance of production, reinvestment of depreciation accruals, and restricted loans.*

*Prices barely equal to production costs and depreciation accruals will normally discourage*

do not need to be taken into account.

1. Prices which exceed production costs by enough to provide a liberal return on the company's invested capital, without discouraging customers' demand, encourage the company to increase the volume of production of such goods and services through greater output of existing facilities and through the creation of new facilities. In such cases the company's earnings statements, together with its prospects, will convince bankers that expansion of credit is well warranted and will convince the public that new equity securities are a good buy. The result will be greater allocation of resources to this field.

2. Prices which are equal to production costs, including earnings on invested capital at a ratio moderately better than the rate earned on long-term government bonds, encourage conservative expansion of production facilities. In such cases, the degree of efficiency of management will often make the difference between a satisfactory and an unsatisfactory rate of return. Moreover, the prices of capital goods and the cost of capital will sometimes have an important influence on the decision whether or not any particular extension of production facilities will be made.

3. Prices which are equal to production costs, including earnings on invested capital at a conservative rate in line with that earned by long-term government bonds, discourage expansion of production resources but are considered to justify maintenance of production from existing facilities and reinvestment of depreciation accruals. In such cases the company's earnings statements, together with its limited prospects, reinforced by a strong cash position, will ordinarily convince bankers that restricted loans may be made, and the public that senior securities are sound investments.

4. Prices which are barely equal to production costs, excluding earnings on invested capital but including depreciation, will cause hesitation in reinvestment of depreciation accruals and often lead to the use of such accruals to strengthen the cash position and perhaps ultimately to reduce the capital invested in the business. In such cases, concerns will, if practicable, direct their resources to more

profitable products. New bank loans and new public investment are justified only in exceptional cases.

5. Prices which for an industry as a whole are only equal to bare production costs, excluding earnings on invested capital and depreciation charges, will lead to reduced production through inadequate replacement, failure of the less successful concerns, and diversion of activities to other products.

6. Prices for current output which, for a particular concern, fail to cover production costs, excluding earnings on invested capital and depreciation, will result in immediate curtailment of production unless

- (a) costs can be reduced by cutting wages and salaries, postponing maintenance expenditures, or other devices;
- (b) the concern has accumulated funds which it is willing to use up in order to keep going, either in the hope of better times later or while introducing improved methods or machinery in the expectation of reducing costs;
- (c) the concern is making profits on other products which it is willing to use to offset the losses on the unprofitable portion of its output;
- (d) necessary out-of-pocket expenses of shutting down are a greater financial drain than continuance of production.

The process of diverting productive effort from unprofitable items often takes much longer than is sometimes assumed by economists or would have been considered financially sound by the producers if they had foreseen all the complications. Few theorists have recognized that an analysis of the processes of diversion of effort away from unprofitable lines is an important economic problem. Such diversion may be effectuated by transfer of employees and equipment, as much as possible, to other lines; by deferring normal expenditures for repairs and replacements and using maintenance and depreciation funds for other purposes; or by liquidating the company and salvaging the plant. The last-mentioned procedure usually results in substantial losses of "book value" which are often omitted from summaries of industrial profits.

*loans or investment.*

*Prices barely equal to production costs lead to reduced production.*

*Prices not covering production costs will curtail production at once unless costs can be reduced, or accumulated funds are used to keep going, or losses are offset by profits on other products, or continuance is less costly than shutting down.*

*Diversion of productive effort from unprofitable lines often is slower than expected. It may involve transfer of employees and equipment, deferring of normal repairs, or salvaging of a plant.*

*The price system gives buyers a choice among types of machinery and equipment for productive use.*

From the point of view of the investor and the purchaser of capital goods, the price system makes possible a choice between alternatives on the basis of the prices attached to different types of machinery and equipment. These prices roughly represent the physical resources, labor, and management skill required to make the different articles available and to keep productive plant available for future demand.

#### HOW PRICES FUNCTION IN STIMULATING OR POSTPONING DEMAND FOR GOODS

*When there is peak demand, high prices operate to sort out and favor the more intensive and defer the less intensive demand.*

In periods of peak demand for capital goods, high prices are ordinarily a useful means for limiting and selecting demand, by the automatic process of eliminating the less intensive demand in favor of the more intensive, without the necessity of investigating each buyer's situation and desires, a task which is neither suitable nor congenial for businessmen. Merely extending the date of delivery will not accomplish this end. The individual who has a more or less casual demand for a machine is just about as likely to order it even if the delivery is distant; but, if he feels that he is going through a period of peak prices, he is likely to postpone ordering for his requirements. Thus he leaves the way open for the man who has more serious need for such equipment to satisfy his requirements.

*When demand slackens, prices tend to fall and to force reductions in cost or in output.*

Conversely, when demand slackens, the intelligent producer eliminates all the nonessential elements of cost, wherever practicable, and then makes, if practicable, a reduction of price, in excess of the reduction in cost, as an inducement to purchase. He recognizes, however, that in many cases price reduction will not stimulate demand enough to obviate the necessity of reducing output also. When this reduction of price shall be made is naturally a question of merchandising and timing, but, in general, prices should be the lowest and the margin of profit the narrowest at the bottom of demand.

Ultimately, if the demand slackens enough as the result of depression, the producer is faced with the question: which he would prefer, to go without a given piece of business because he cannot make a profit on it, or to take it at a price that would leave him with a smaller loss



than he would have had without it. This might be said to be the rock-bottom stage of industrial pricing on the part of intelligent producers, who know their costs.

### SOME FACTORS IN SPECIFIC PRICE VARIATIONS

Examination of the course of prices of different goods reveals a wide variety of different patterns of change. From the point of view of the fluctuations of the business cycle, it may be noted that prices of certain products rise as business activity increases and fall as business activity declines, while prices of other products and services remain practically unchanged. From the point of view of the long-term trend, after averaging out the effects of the business cycle, prices of certain items, such as copper, incandescent lamps, and automobiles, show a declining tendency through the years, while others, such as haircuts and doctors' fees, show a rising tendency. Prices of perishable goods, such as fresh vegetables, vary with the season of the year and at times dip sharply because of gluts, while the prices of many durable goods show little, if any, seasonal variation and are seldom sold at "giveaway" prices. Clothing and jewelry which hit the bull's-eye of fashion command a price far above cost for a while, and when they go out of style can be sold only at a terrific markdown.

Interpretation and fair criticism of these different patterns of change depend on a thorough analysis of the supply-and-demand situation in each case. Back of offers to buy and sell in any market are various conditions and ideas which affect the urgency with which offers are pressed and the willingness to revise unsuccessful offers. We may note, with brief comment, some of these factors:

#### 1. *Relative Durability of Product*

Obviously the man with a perishable product to sell will prefer to accept almost any price rather than to make no sale at all, whereas the man with a durable product can refuse to sell unless the price is as favorable as what he thinks he can get at a later date.

#### 2. *Contrast between Selling from Stock and Producing on Order*

The manufacturer or dealer who has a large stock of a particular article on hand is often under pressure to

*Prices of different goods have different patterns of change. Some items show a long-term declining tendency; others, the reverse. Some items are subject to seasonal variation, others not. Changes in style boost or break prices.*

*Some of the factors affecting these patterns will be noted briefly.*

*Sellers of perishable products are least able to hold out for satisfactory prices.*

***A seller with heavy inventory may have to make price concessions.***

***A producer on order has an advantage.***

***In a middle position, a manufacturer is well situated to keep prices in line with costs.***

***But with rigidity of specialized plant and skills a producer may accept lower prices rather than keep plant idle.***

***Buyers may defer some kinds of purchases, but not others.***

accept an unremunerative offer from a possible purchaser. On the other hand, the manufacturer or contractor who has the facilities and skill required to produce a locomotive, a ship, or a house, but has not actually made any commitment of materials or labor to produce such an item, is in a better position to insist that the price at which he will produce shall cover all his costs plus a profit. The point that makes the difference in the bargaining situation is the relation between time of production and time of sale—whether the contract of sale, including the firm specification of price, is made before or after production expenditures are made.

In an intermediate position is the manufacturer who has a small stock of goods on hand with productive facilities to make more as sales are made. If such a manufacturer finds that a certain item cannot be sold at what he considers a satisfactory price, he can perhaps shift his facilities to a more remunerative line or at least reduce his scale of activities. For such manufacturers sales prices tend to be in line with costs plus at least moderate profits.

### *3. Transferability of Productive Facilities*

Because of the rigidity of specialized plant and specialized skills, many producers have no real range of choice as to what they will turn out and may consider it more advantageous at times to accept an offer that is not remunerative but merely reduces the loss that they would suffer if the plant remained idle. A shipbuilder, for instance, may contract in times of depression to build a ship for even less than the cost to him of direct labor and materials, for the sake of keeping his organization together and working.

### *4. Relative Necessity of Product to User*

The prospective purchaser can postpone buying some things, but must secure supplies of other items from day to day to keep alive, or to maintain his standing in the community, or to carry on his business activities.

### *5. Attitude of Seller toward Costs*

Some prospective sellers have more rigid ideas than others in regard to selling below the computed costs of

production. Obviously no businessman can be successful unless, in the long run and for the total of all items handled, his receipts from sales exceed his aggregate costs properly determined. Various circumstances, however, may make it better policy to sell some items at some times below complete costs.

*Sellers may have more or less rigid ideas about selling below costs.*

#### 6. *Practicability of Creating New Productive Facilities*

If the quantity of a product wanted at a current price exceeds the quantity available, the free working of the competitive market system would result in establishing a higher price and also perhaps, if the demand is considered likely to continue, in creating new facilities. The practicability of such new facilities and the length of time required to get them are important factors in determining the equilibrium price in the meantime.

*When demand exceeds supply, the prospect of new productive facilities will affect interim price.*

#### 7. *Attitude of Buyer toward Long-range Considerations*

Some business concerns take the long-run point of view rather than concentrate on immediate gains from the single transaction. For instance, a large company which needs a regular supply of fuel may not try to snap up market bargains due to distress of particular suppliers if such purchases would interfere with the flow of fuel from its regular suppliers. What is being bought in such cases is really regularity of supply rather than fuel as such. Anyone noting such circumstances in a casual way might believe that the regulatory mechanism of the competitive market was not functioning, whereas the large company would still be selecting from possible suppliers the one that could, over the long term, furnish most satisfactorily and cheaply what it wanted.

*Attitude of buyers toward long-run relations with suppliers, or vice versa, may affect prices of goods they buy or sell.*

#### 8. *Attitude of Buyer and Seller toward "Just" or "Fair" Prices*

In the discussions which sometimes precede the price bargain, many buyers and sellers devote a good deal of attention to what is to be considered a "fair" price. Such a concept must be derived from prices previously established for the same or similar products, or from costs plus what is considered a fair profit, or from the cost of a sub-

*The concept of a "fair" price may influence either buyer or seller more than the competitive price situation.*



stitute product or course of action. If both buyer and seller attach importance to making the price "fair," the result may be in some instances that the seller accepts a lower price than he could exact in view of the limitations of supply with respect to demand, while in other instances the buyer pays a higher price than he would have to pay on strict competitive considerations. In most such cases, long-range considerations, such as continuance of an established connection and assurance of desired quality and service, really underlie the apparent departure from strict competitive pricing.

### *Variations during Cyclical Changes*

*On account of these factors, the ups and downs of business activity affect prices of different goods in varying ways.*

These are among the factors that affect the prices at which offers to buy and sell a particular product in a particular market will be made. It is obvious that as a result of competitive choice under these conditions prices of different commodities will take different courses.

In particular, the price changes of various commodities, as related to the ups and downs in business activity, follow several clearly distinguishable patterns, according to the way in which these factors work under various circumstances. In some cases, price fluctuations paralleling those of industrial activity are forced by national or international market conditions affecting either the product itself or the raw materials of which it is made. In other cases a price increase accompanying an increase in business volume results from economically correct decisions of businessmen to avoid unsound expansion of production facilities or to accumulate reserves against an expected period of reduced earnings. In still other cases, often involving agricultural products, the price decline accompanying reduced activity is exaggerated by the reluctance of producers to curtail production of goods which, as indicated by the market price, are no longer wanted to the same extent. The price mechanism cannot perform its regulatory function smoothly if enterprisers are tardy in accepting its guidance.

*Prices of some products remain almost*

Prices of some products, however, remain almost uniform throughout the cycle. In such cases, most frequently involving highly fabricated articles, the producer

prefers not to raise his offering prices in times of great activity, since he is able to supply the quantity wanted at these prices without expansion of productive facilities. The producer may maintain his prices also in times of reduced activity, on the ground that the additional sales he could make at a lower price would leave him with smaller net profits in the long run. In each such case the correct principle is believed to be that the play of competition will decide whether price maintenance or price reduction in periods of diminished activity is the wiser policy, from the point of view of the general public interest and the long-run development of production and trade.

From the point of view of the producer, especially of capital goods, there is also an opportunity for choice based on his judgment of the effect of price reductions on demand. As a matter of fact, it is not to be expected that reductions in prices of capital goods in the declining phase of the business cycle will stimulate demand enough to increase dollar sales volume. New purchases of capital goods depend on seeing a market for the goods which will be produced by the new machinery or for the office space provided by the new office buildings. It is hard to believe that there will be such a market within a year or two when existing machinery is partly inactive and there are numerous offices vacant in existing buildings, and most possible purchasers will therefore postpone purchases in spite of a moderate saving in price.

Consideration of the various factors listed above, especially the relation of time of sale to time of production, helps to explain the varying relation of price to cost. For instance, in the case of agricultural products, a year's supply may be already in the hands of the producer when he enters the market. It is obvious that in such circumstances he cannot adopt a policy of refusing to sell stock on hand below what he considers his cost, and the prices of such goods are, therefore, not usually closely related to cost. On the other hand, in the case of goods other than farm products, the stock on hand at any time may be only a few weeks' supply, but productive facilities are available to replenish the stock as it is sold. It is obvious that the price of such goods will ordinarily not be less than out-of-pocket

*uniform  
through a  
cycle.*

*Purchases of  
capital goods  
are not stimu-  
lated by lower-  
ing prices in a  
period of gen-  
eral business  
decline.*

*Prices of farm  
products have  
less relation to  
costs than have  
prices of  
manufactured  
products.*

*Manufacturers who adjust to market circumstances have an advantage, but must recover all costs in the long run.*

*The processes of competition are most likely to work out to the "golden mean."*

*Government interference with prices generally discourages production, hinders growth and adaptation, and may produce results quite contrary to the purpose of the intervention.*

*Price control of a commodity, such as*

costs plus something more depending on the ease with which productive facilities can be shifted to other uses.

In view of the different possible methods of computing costs and the different views about how to treat costs in establishing prices, such problems can be solved most advantageously by leaving them to be worked out, in the main, through competition. The manufacturer who tries diligently to obtain a rigid profit margin above computed costs will lose ground in the long run to the manufacturer who adjusts promptly to market circumstances; on the other hand, the businessman who does not give due consideration to recovering all costs including capital costs in the long run will finally cease to be an independent businessman. The intervention of a government agency to impose lower prices or even exert pressure toward lower prices would replace these economic forces with bureaucratic rigidity and political pressure. The golden mean is more likely to result from the working out of the choices of the general public through the processes of competition.

#### GOVERNMENT INTERVENTION TENDS TO INVALIDATE COMPETITIVE PRICE SYSTEM

Interference with the free functioning of the competitive price system, whether by government or otherwise, generally results in discouraging the production of goods that the public wants, even when that is not the intention of the interfering agent. Such interference frequently introduces rigidities into the economic structure that hinder growth and adaptation to changing conditions.

When government interventionist measures are directed at fixing prices, wages, and interest rates at amounts different from those prevailing in the unhampered market, they produce effects according to the inevitable laws of the market. When these effects appear, the government will not like them; on the contrary, it will consider them even less desirable than the conditions it wanted to change.

Let us illustrate this statement by an analysis of a case of price control.

If the government wants to make it possible for poor parents to give more milk to their children, then it must buy milk at the market price and sell it to those people



at a cheaper rate with a loss; the loss may be covered from the means collected by taxation. Although there may be different views about the desirability of this expenditure for social-welfare purposes, this procedure does not imply any government intervention in the competitive price system. But if the government simply fixes the price of milk at a lower rate than the market, the results will be contrary to the aims of the government. The marginal producers, in order to avoid losses, will go out of the business of producing and selling milk; they will use their cows for other more profitable purposes, and there will be less milk available for the consumers—not more. This outcome is contrary to the government's intentions. The government interfered because it considered milk a vital necessity. It did not want to restrict the supply.

Now the government has to face the alternatives: either to refrain from any endeavors to control prices, or to add to its first price-control measure a second one, *i.e.* to fix the prices of the factors necessary for the production of milk. Then the same story repeats itself on a remoter plane. The government must go on to fix the prices of the factors of production necessary for the production of those factors of production which are needed for the production of milk. Thus the government has to go further and further fixing the prices of all the factors of production—both human (labor) and material—and to force every entrepreneur and every worker to continue work at these prices and wages. No branch of production can be omitted from this all-round fixing of prices and wages and this general order to continue production. If some branches of production were to be left free, the result would be a shifting of capital and labor to them and a corresponding fall of the supply of the goods whose prices the government has fixed. Yet it is precisely these goods which the government considers especially important for the satisfaction of the needs of the masses.

But, when this state of all-round control of business is achieved, the market economy has been replaced by a system of directed economy.

People who like to meet logical difficulties by compromise may suggest that the best procedure would be to

*milk for example, may work out to reduce the supply of it.*

*And control of the price of one commodity may require the control of prices of other commodities, until a market economy has been displaced by a directed economy.*

*A moderate degree of intervention, on account of the complex relationships of the market, seems to require a widening circle of controls.*

*The effects of price controls are lessened if prices imposed are near freely determined prices.*

*Government-fixed utility rates, for example, if allowing wages and capital return like those in other business enterprises of similar risk, may not impair efficiency; but they will if fixed without*

have a moderate amount of government intervention rather than either no intervention or a completely directed economy. This is sometimes referred to as the "middle way." But, as our wartime experience has shown, the relationships between the markets for different products and the various stages and alternative processes of production are so complex and interwoven that arbitrary intervention at any one point seems to require a continually widening circle of additional interventions. The only workable and economically sound procedure is to have prices determined in all practicable cases by the functioning of a competitive price system.

One general comment may be made in regard to prices imposed by government direction; namely, that the injurious results of such a direction of price are much less if the imposed price approximates what the freely determined price would have been. Such approximation may be obtained by analysis of costs and current variation in the different cost factors, by comparison with prices in previous periods and in parallel lines, and by proper allowance for the effect of proposed price changes on demand. It is, therefore, desirable to establish two lines of defense against central direction of the economy. Ideally, there should be no central direction at all; if, however, the majority of the people insist on some degree of direction, an effort should be made to set up procedures that will produce prices approximating those that would be established in a free market.

As an illustration, consider rates set for public utilities by regulatory commissions. If these rates are set so that the compensation of workers and the return on invested capital in the utilities correspond to the compensation and return available in business enterprises of similar risk in the same locality, the utilities will be able to secure workers and capital. If, however, the rates are established on the basis of arbitrary limitations on the maximum salary that can be paid and on the rate of return on investment, the utility will very likely not be able to maintain its efficiency. It should be noted that the basis for establishing arbitrary limitations on rate of return is sometimes described as preventing "excessive" profits, or setting a "just" or "fair"

rate. As long as these terms are justified subjectively rather than statistically, they lead to rates which will not function satisfactorily to develop the maximum volume of business for the public utility.

*regard to these considerations.*

#### REVIEW OF ERRORS IN ATTEMPTED DIRECTION OF PRICES

In view of the importance of recent governmental efforts to control or influence prices, most of the rest of this chapter will be devoted to a discussion of the principal economic errors which have been or are being made by governmental agencies or representatives, in imposing price reductions, establishing ceilings, or prosecuting under the antitrust laws, or more generally in advocating pricing policies for industry.

*Many economic errors have been made by government in interference with prices.*

#### *Efforts to Exempt Farm Prices from Economic Principles*

Several of these errors have already been dealt with in an earlier section of this chapter. It has been noted, for instance, that the notion that parity prices are economically desirable for agricultural commodities is inconsistent with the changing nature of our economy. The parity price for any commodity is defined as the price that will give that commodity a purchasing power with respect to articles that farmers buy equivalent to the purchasing power of that commodity in the same base period (August 1909 to July 1914). The effect of adopting parity as a desirable goal would be to scrap the function of price as a regulator of our economic system. According to the parity idea, even though the cost of production has been lowered by greater mechanization, or new low-cost supply areas have been opened up, or the public has decided that it no longer cares so much for that commodity, still its price should maintain its former relative level. If artificial means are employed to keep the price at least up to the parity level, more of that commodity will be produced than is really wanted, leading to a greater and greater pressure on the market and ultimately a serious and often abrupt decline. Admittedly, it is painful for those who have concentrated on a certain line of production to transfer their efforts to something else; but such a transfer is part of the necessary functioning of our individual enterprise system. Subsidies

*"Parity prices" scrap the function of price as a regulator of our economic system, lead to oversupply, and eventually cause a decline of prices.*



and special regulations may temporarily prevent such necessary adjustments, but they are definitely contrary to sound economic principles.

### *Overlooking of Varied Behavior among Types of Goods*

*Another error is failure to recognize that a manufacturer's costs are largely fixed by factors beyond his control.*

Another error, discussed in a previous section, is failure to recognize the wide variation in price behavior among various types of goods. In particular, government officials and others interested primarily in agriculture have argued that the failure of prices of manufactured goods to decline in a depression to the same extent as farm products reflects an arbitrary and economically unsound policy on the part of manufacturers. This criterion, as pointed out above, does not give due weight to the extent to which a manufacturer's costs are fixed by factors beyond his control; e.g., cost of most materials purchased, real-estate taxes, and, in the main, salaries and wages. Although many farm costs also are rigid, it should be recognized that manufacturers' costs, in general, have less flexibility.

*Nor are differences in types of goods recognized, as to factors affecting buyers' choice.*

Still another error, also based on failure to recognize the effect on price behavior of differences in types of goods, is the criticism that buying of capital goods, especially factory machinery, is not on a price-competitive basis. The point is that major considerations in the purchase of such goods are quality and future availability of repair parts. The reputation and probable continuity of the producer's organization are valuable intangible supplements to the physical goods actually delivered. Interference with the operation of the equipment due to defective workmanship or unavailability of parts would more than offset a minor saving in original cost. For these reasons a purchaser may be giving proper consideration to the factors underlying price when he is willing to pay somewhat more for the machinery produced by an established manufacturer with a high reputation.

### *Ignoring of Secondary Effects of Directed Price Change and Imposition of Price Ceilings in Spite of Higher Costs*

*The inevitable effect of price changes on*

In recent years the assumption appears to have been made originally by agencies regulating prices that prices may be raised or lowered, or price ceilings imposed, with-

out producing any changes in the volume of production of the goods affected or similar materials. As a matter of fact, the function of price as a regulator of the economy necessarily implies that the effects of such out-of-the-market regulation will often be important.

If, as in the cases of dresses at the low end of the price spectrum and established brands of nickel candy, the directed price results in less profit than is available by some other use of the same materials and productive effort, then the new production of those commodities is likely to drop.

If the directed price raises the cost to the user above that of an available substitute, demand will drop as a result of diversion to such a substitute. This principle was exemplified in connection with the industrial size of anthracite. When the price of all sizes of anthracite was raised uniformly 45 cents a ton to compensate for the excess costs of Sunday overtime work on the part of the miners, some industrial users of anthracite shifted to bituminous.

If a directed price makes it impossible to raise wages to the level obtaining in parallel industries in the same neighborhood, output will drop because of the inability of the enterpriser to retain his labor force. This was illustrated early in the war when miners of zinc ore were unable to pay Saturday overtime premiums because of the ceiling imposed on the price of zinc concentrates.

Likewise, if a directed price cuts the financial return on investment below that available in parallel industries that can employ more capital, new capital will not be provided for the industry whose prices are so restricted.

#### *Erroneous Assumptions as to Relation of Prices, Volume of Production, and Costs*

It is sometimes assumed that a lower price will usually increase sales sufficiently to compensate for the reduction in return per unit and for the increased expenditures required to increase the volume of production. These assumptions are, in effect, that the elasticity of demand is very large and that the cost per unit declines rapidly with increased volume. There are few commodities for which these assumptions are known to be correct, and fewer still where the assumptions are known to be correct without al-

*volume of production has often been ignored.*

*Directed prices yielding less profit will divert production to more profitable commodities; if giving substitutes a price advantage, they will reduce demand.*

*If directed prices keep wages below community level, workers will shift and output drop.*

*Also if they cut return below current level, new capital will not be obtainable.*

*The assumption that lower prices will be compensated by increased sales is true of few commodities.*

*Elasticity of demand is variable and not quickly effective. Reduction of unit costs takes effect slowly with increase in volume.*

lowing an interval of time for increases in demand and reductions in costs to become effective. The practicable course of action, therefore, is for the producer to reduce prices step by step as he reduces his costs or develops additional demand, subject always to the requirement of sound management that over the long run total estimated receipts shall exceed all estimated outgo. Estimates of receipts must allow for the reduced price per unit, and estimates of outgo must allow for expenditures due to increased volume of production, as well as for possible economies in cost per unit.

A related erroneous idea has to do with the effect of increased volume on overhead costs. It is argued that a concern which attains an increased volume has a larger base to absorb overhead and, therefore, should lower prices if labor and material costs are unchanged, and need not raise prices even if labor and material costs are increased. It is assumed by proponents of this erroneous view that overhead costs incurred in any given period of time are necessarily to be apportioned to the units of product produced in that period of time.

*Overhead costs per unit of product vary little when apportioned over a business cycle, and increased volume reflecting a normal fluctuation does not justify lower prices.*

In determining the costs significant for price setting, however, it is better to base the apportionment of cost on a period long enough to cover all phases of the business cycle. Such an apportionment is often carried out through the mechanism of "standard costs." The standard cost of any item is taken as the aggregate of the normal cost of the material required, plus the cost at specified rates of the labor that should be used, plus the appropriate share of total overhead when the plant is operating at an expected average rate. The appropriate share depends on the production expected from the entire plant and may be determined differently for different types of overhead. If some variation of the standard-cost method is used, overhead costs per unit of product are more or less the same for different phases of the business cycle. Increased volume which merely reflects a normal fluctuation in business activity, therefore, does not justify lower prices. A permanent increase in volume would, of course, call for reconsideration of all cost computations; and, if it requires less than proportionate increase in capital investment, and other



factors are unchanged, the new volume would justify lower prices. As will be stated more fully later, lowering of prices when made practicable by reduction of costs is generally accepted as sound business policy, but this trend toward lowering prices should not be confused with the proposal to make prices fluctuate inversely with the business cycle.

### *Should Industry Use Full Capacity Continuously?*

Another related erroneous idea is that industry should operate continuously at 100 per cent of capacity (1) by stimulating demand, whenever it threatens to drop, by reducing the price of its product, (2) by manufacturing for stock when demand lags, and (3) by refraining from creating new facilities which will not be used at nearly a 100 per cent rate. It is contended that failure of industry to approximate operations at 100 per cent of capacity indicates either a defect of the enterprise system or antisocial decisions by business management.

From the standpoint of the general soundness of the economy, the proper relation of capacity normally used to total available capacity should be decided on far broader grounds. Excess capacity is often highly desirable, or even a necessity, both in the field of private enterprise and outside of it. It is recognized as normal in many particular cases. For instance, public roads are constructed so as to carry the peak traffic, and churches are built to accommodate the worshipers for an hour and a half on Sunday morning.

In the field of private enterprise, there is an important place for a margin of capacity over average operating rate, especially for plants producing capital goods. Such a margin is desirable for the following reasons:

1. In order that the individual consumer may be able to buy what he wants when he wants it, industry in general must be able on short notice to increase supply to match a bulge in demand. Prompt increases in supply at reasonable cost are impossible in cases where the method of production requires special machinery, unless there is a reserve of such machinery and productive skill.

2. Seasonal or emergency needs can be met most

*Should industry operate always at 100 per cent of capacity by reducing prices, by piling up stock when demand lags, or by restricting expansion?*

*Excess capacity is often highly desirable, even necessary.*

*A margin of capacity is desirable (1) to meet bulges in demand; (2) to take care of seasonal changes; (3) to have equipment for new products, and for old products in obso-*

*lescence; (4) to meet fluctuating demand for capital goods; (5) to provide for contract sales; and (6) to anticipate indicated growth.*

efficiently by having available some plant which is used only part of the year, or only in emergency.

3. As improvements are made in the design of products and in methods of production, there always will be some machinery and equipment used only part of the time because of the novelty of the product, and other machinery used only part of the time because of obsolescence of product or method of production.

4. In the case of plants producing capital goods, a relatively large margin of capacity is necessary because demand for such goods has always fluctuated widely in the course of the business cycle. Although stabilization of the demand for new capital goods is one of the desirable economic goals of industry, only moderate stabilization seems likely in the next decade, so that continued fluctuation in demand for capital equipment is to be expected.

5. For most capital goods, for "style" goods, and for some goods which deteriorate soon after production, or which rapidly become obsolete because of technical improvements, it is not possible to start production in advance of a contract of sale that determines such things as location, size, and detailed characteristics. Production for stock in such cases is not a practicable means of reducing fluctuations in operating rate.

6. Although consumption may vary by very small gradations, production facilities can be supplied ordinarily only in units of a substantial ratio to aggregate demand. Any productive unit produced in anticipation of future growth must of necessity be in excess of present need.

The punishment of mistakes of judgment in constructing excess plant facilities may well be left to the forces of competition in a free-enterprise system.

### *Is Price Rigidity an Important Factor in Causing Depressions?*

Some people argue that price rigidity, meaning the failure of prices to fall during depressions, always intensifies the depression and delays recovery; and that, correspondingly, a reduction in all the prices that remained rigid during the last depression would have facilitated recovery. The upholders of this erroneous view insist that

*Does maintenance of prices in a depression cause unemployment by reducing demand?*

the maintenance of prices in a depression causes unemployment by reducing the demand for goods.

It is agreed that the demand for goods would usually be increased somewhat if prices should be reduced; but the question whether, on the whole, such price reduction would have favorable effects calls for consideration of all the factors. These include the consequences of price reductions to the producer's financial solvency and to the entire economic situation. It is desirable, also, to consider duly the differences in conditions affecting different items. The prices of some commodities are so close to their cost of production that any reduction in price not accompanied by reduction in underlying costs would lead to insolvency and total suspension of production, or to such reduced income over a sustained period as to prevent accumulation of resources adequate to replace facilities as they are worn out or become obsolete. Thus the accumulated capital of industry and the resources of the nation would be consumed without compensating advantages.

In some cases, the individual manufacturer has little chance of reducing his prices, since his costs of labor, material, and taxes are rigid. If producers with rigid costs price themselves downward into bankruptcy, the resulting immediate reduction in the purchasing power of the community would necessitate still greater, rather than less, reduction in sensitive prices, because it would result in less employment and a smaller national income.

In many cases the demand for a commodity would be increased only slightly by a price reduction. That is true of coffins; it is true also of some luxuries bought by persons who do not bother about price, and of other luxuries that had been bought by persons whose incomes become too small in a depression to permit them any longer to buy luxuries. It is true also of a large number of producer's goods, which will not be bought at any price unless the producer can use them to produce goods that he can sell or is unusually forehanded with ample cash resources. In a depression, of course, the amount that producers can sell is less than normal. It is true to a large extent of consumer's durable goods, of which the consumers have a supply on hand that can be used instead of new ones. It is true

*Price reductions may increase demand if they do not affect the solvency of producers and suspend production. General price reduction might consume capital and other resources without compensating advantages.*

*Reduction of prices that forces out producers may reduce purchasing power.*

*Demand would be increased little by reduction in prices of some luxuries, of producer's goods, of consumer's durable goods, and of goods for which lower-priced substitutes are available.*



*Unless reducing the price of any product would clearly increase sales and benefit the producer, it can hardly be expected.*

*Nor can prices be expected to be flexible if wage rates and taxes are rigid. Reduction of weekly earnings, beyond a reduction in cost of living, impairs buying power, and may be avoided by adapting hiring rates and by other means.*

*Easing taxes in depression may mean government borrowing. All relevant factors must be considered.*

also of goods for which there is an acceptable substitute at a still lower price. Unless price reduction stimulates sales it does not stimulate employment in the industry affected.

Although reductions in price are properly considered as means for countering declining demand, a general blind policy of reduction in all cases would often prove unsound. In general, a producer can scarcely be expected to lower his selling prices unless the reductions would result in an actual or relative increase in sales of the articles in question and leave the producer better off in the long run, all things considered, than he would be if he did not stimulate demand by reducing prices. In some cases, a temporary loss may be justified in order to maintain a going concern.

It is also believed to be unsound to hold that, while commodity prices should be flexible, wage rates and taxes should be rigid. As long as these elements of cost are rigid, the amount of flexibility that can be introduced into the prices of fabricated commodities is rather limited. As far as wages are concerned, direct reduction of money wage rates of already employed individuals is very upsetting. Reduction in weekly earnings, because of reduction in hours or rates, greater than the reduction in the cost of living, disturbs their capacity to buy consumers' goods. It is feasible, however, for a company to adapt its hiring rate to the market and secure some moderate savings in wage costs without disturbing wage rates of old employees. It is possible also to make savings by reducing overtime, and such reductions in earnings are not so disturbing to the workers as cuts in hourly rates if they have recognized that large overtime earnings are somewhat exceptional and should not be counted on indefinitely.

In the case of taxes, some economic opinion favors an unbalanced budget in depression, permitting an easing of the tax rate and relying in part on government borrowing at such times in preference to increased taxes.

The problem of the best procedure in times of depression is, of course, somewhat complex and must be approached with a broad consideration of all relevant factors rather than by blind adherence to flexibility as contrasted with rigidity.

*Does Uniformity of Price Prove Collusion?*

Some government actions indicate a belief that price uniformity on a standardized product is necessarily, in itself, proof of collusion or monopoly control over price. This view indicates a lack of understanding of normal procedures.

When any producer sells a standardized product or offers it for sale, information as to the agreed-on price, or offering price, is very likely to reach other producers through reports in trade papers, or statements of actual or possible customers. Moreover, in some cases, when such information is not available, the cost of production of standard articles by standard machines, using labor at established rates of pay, may be very uniform, and, because of active competition, largely determinative of a normal lower limit of selling price. In other cases, no current information may be available, but information as to what prices were in recent years or in earlier years under similar conditions may be available. Any judgment as to the significance of price decisions must logically be based upon this general availability of price information, even without direct contact between different producers.

When a second producer considers at what price he will offer his goods for sale, he will naturally be greatly influenced by what he knows of the first producer's current price and the prices which have been considered typical in the past. He will seldom set a price higher than that of the first producer unless he can offer some advantage of quality of product or associated services or knows that the first producer does not control much additional productive capacity. On the other hand, the second producer will be disinclined to set his price lower than that of the first producer unless he is willing, and is provided with resources enough, to engage in price competition with the first and other producers, or knows that for some exceptional reason they will not meet his price cut.

Uniformity as between different producers, therefore, can easily arise from circumstances which imply no collusion or formation of a controlling monopolistic group.

*Does price uniformity on a product prove collusion?*

*The cost of production of a standard article, by standard machines and at standard wages, tends to set a normal minimum price. And price information is available without collusion.*

*One producer will not set his price higher than others unless he can offer some advantage; or lower unless he can face price-cutting competition.*

*Does a High Rate of Profit Prove Prices Excessive?*

*Are excessive prices indicated by high profits?*

*If the highest-cost producers, whose output is needed, are enabled to continue producing, the most efficient producers will have higher profits.*

*Their inducement to efficiency should not be discouraged.*

*American business largely accepts certain procedures and patterns of a price policy.*

*Costs computed by standard principles should be taken as a factor in free price determination.*

*Prices should be reduced as*

Actions of some government agencies seem to imply that a large margin of profit, or a high rate of profit on the investment, is conclusive evidence that the seller is charging more than a "fair" or reasonable price.

It is obviously proper, however, and universally accepted by economists for over a century, that under conditions of free competition the prices of identical products sold in a given market tend to be identical. Since it usually happens that the producers' costs vary considerably, some must have a higher margin of profit than others. The highest-cost producer whose output is necessary to satisfy the demand (the "marginal" producer) must over the long run obtain a price sufficient to enable him to continue in business. The more efficient producers must therefore get a higher profit. That is the reward for and the inducement to greater efficiency. Administrative procedures which reduce the price which the most efficient producer is permitted to charge, merely because he makes a large profit, tend therefore to discourage efficiency and are contrary to the fundamental basis of the competitive individual enterprise system.

THE PRICE POLICY OF PROGRESSIVE AMERICAN BUSINESS

Although many of the price policies advocated by government agencies either would not work at all or would have bad results, there is a place for general statements of price policy, and in fact American business agrees substantially on certain procedures and patterns of thought which in effect constitute a sort of policy.

In the first place, it is generally accepted as sound that costs shall be determined with considerable care, and in accordance with principles as nearly uniform as is appropriate to the variety of conditions encountered in different industries. The costs so determined are one of the factors considered, often by both buyer and seller, in establishing prices, though the method and degree of consideration are highly varied.

In the second place, as previously mentioned, it is considered desirable policy to reduce prices as permitted by reductions in costs, without impairment of reasonable



profits, since in the long run growing volume and moderate profits per unit are preferable to limited demand at a high price level.

In the third place, reasonable price stability for fabricated goods is considered better for all concerned than erratic fluctuations resulting from undue attention to unusual market situations. Such stability may mean that for short periods some producers may have abnormally small profits or even losses, but such minor deviations average out in the long run. As with hotels that take care of clients on the "American plan," it is easier for everyone to set the rate at a good working average figure and avoid meticulous adjustments.

*costs permit, to increase volume with fair unit profits.*

*Reasonable price stability for fabricated goods is better for all concerned than fluctuations to meet temporary market situations.*

## PART II

### PRICE AND PRODUCTION TRENDS

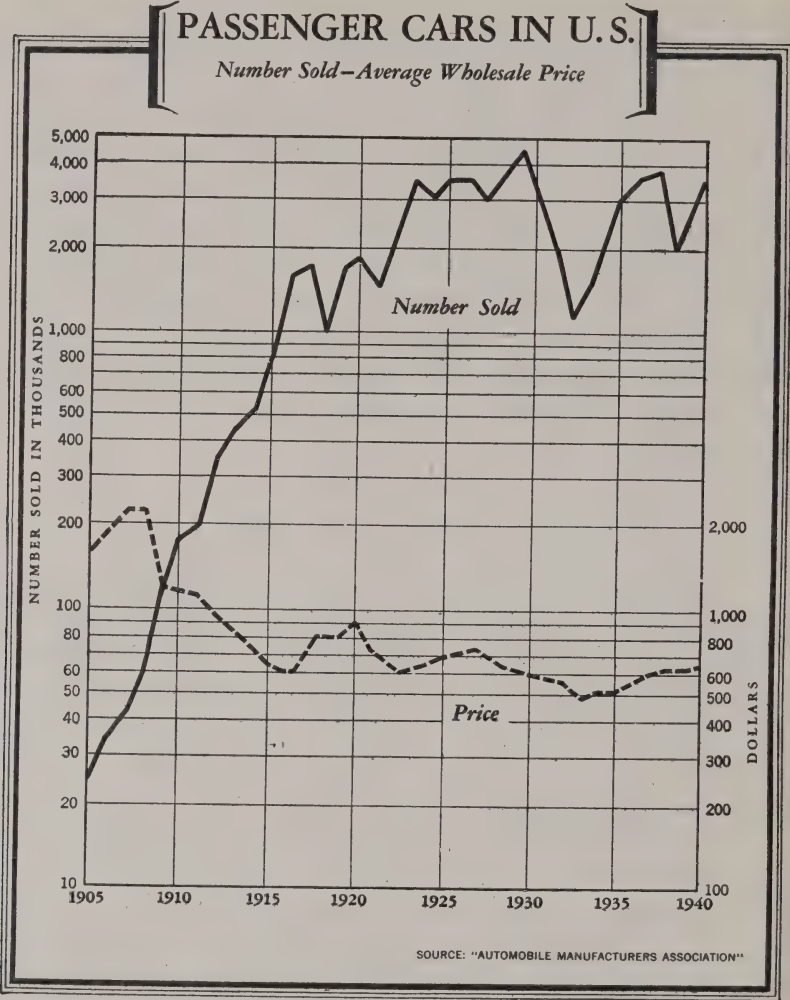
The seven charts to be found in this chapter reveal a few of the interesting trends bearing on prices in selected industries for which data are readily available. Although only a small part of the story is told by these charts, they do provide some indication of the results that have been obtained over a long period of years in turning out more goods at lower prices.

Several of the charts have been drawn on ratio scales in order to emphasize the relative rates of change as between price and production trends. On Charts I, V, VI, and VII the rates of change are indicated broadly by the slope of each curve, while the absolute amounts involved can be read from the vertical scales. The same figures plotted on ordinary arithmetic scales tend to destroy any sense of proportionate changes.

The advantage of the ratio scale is that it clearly portrays the percentage rate of increases or decreases from year to year, which the ordinary arithmetic chart does not do. On a ratio chart, equal vertical distances represent equal percentage increases or decreases, while on an arithmetic scale the vertical distances are a straight measure of the quantities involved.

The first four charts illustrate the growth of automobile production, the decline in the average price of a car, and some of the significant underlying changes in the

Chart I

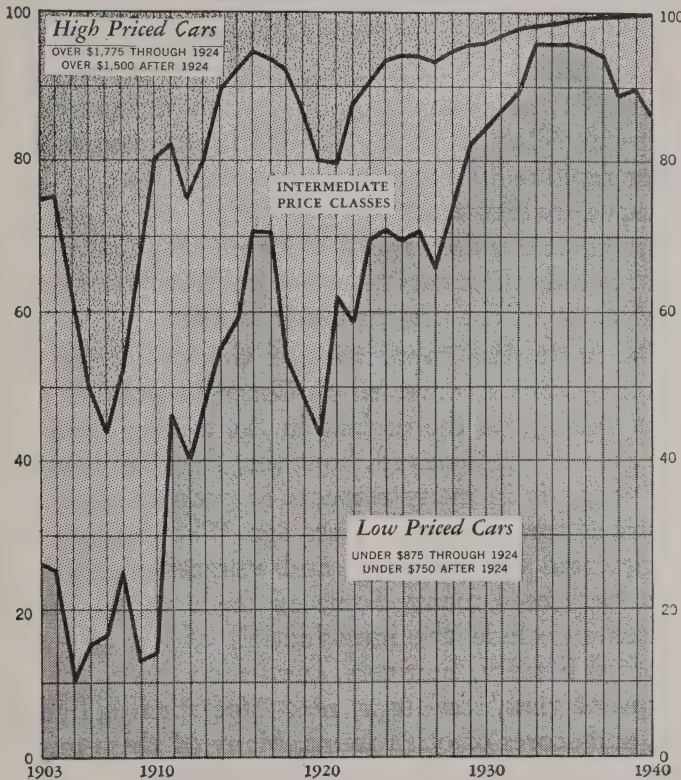


automobile field for which long-term data are readily available. Chart I is plotted on a ratio scale, as mentioned above, in order to indicate broadly the rate of increase in the production of passenger cars and the rate of decrease in the average wholesale price per unit. The divergence of these two trends is at once apparent. Although there have been important variations in each trend from time to time, it may be said that in general the most rapid increases in production were accompanied by the most rapid decreases in the average wholesale price. These changes were particularly evident in the first 10 years shown on the

## DEVELOPMENT OF THE LOW PRICED CAR

*Price Classes of Passenger Cars*

AS PERCENT OF TOTAL NUMBER SOLD



SOURCES: RALPH C. EPSTEIN, "THE AUTOMOBILE INDUSTRY" AND AUTOMOBILE MANUFACTURERS' ASSOCIATION

*Chart II*

chart. Naturally, the rates of change indicated in that early period could not be maintained indefinitely, but it appears that the long-term trend of unit prices has been downward throughout the picture.

By 1940 there were 27 million passenger cars in use in the United States, or the equivalent of approximately one car for every family. The average wholesale price of a passenger car in 1940 was down to almost half of the average price in 1910.

On Chart II the development of the low-priced car is indicated as a price class, revealing the number of low-



priced cars as a percentage of total passenger cars sold. The number of high-priced cars also is indicated as a percentage of the total number of passenger cars sold. The white area between the shaded areas for these two classes of cars may be said to represent intermediate price classes. The limitations of the data required a somewhat arbitrary selection of these price classes, but the figures nevertheless make it quite clear that the relatively low-priced cars made a rather rapid and steady advance toward dominating the automobile market from 1920 forward. The high-priced cars lost ground quite rapidly in the same period, and for the past decade these cars have not constituted a very substantial sector of the passenger-car market.

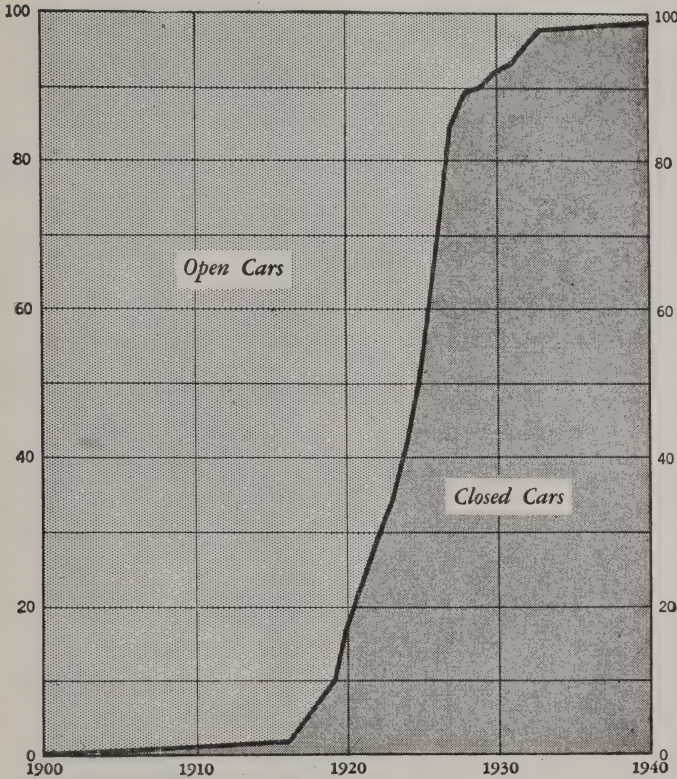
The increasing importance of the low-priced car in the total picture, as revealed on Chart II, has had an important bearing on the decline in the average unit price. It is commonly recognized, however, that the low-priced car of today is in many respects as good as some of the high-priced cars of many years ago. The changes which have increased the usefulness and attractiveness of automobiles have been many. Some of the more familiar improvements include the introduction of the self-starter, the storage battery, bumpers, the balloon tire, the radio, shatterproof glass, steel tops, new-type springs, hydraulic brakes, and scores of other items. Many of these improvements are included in the price of a car as standard equipment.

One of the most obvious developments in the automobile field is indicated on Chart III, which shows the growth of the closed car to a predominant position in the passenger-car market. The overwhelming consumer preference since 1927 has been given to the closed car. Back in the early twenties, the price of a closed car was approximately one-third higher than that of an open car, but this differential was rapidly reduced through technological improvements in design and manufacture, such as the all-steel tops stamped out in a single operation. In recent years there has been a tendency to price an open car—particularly the convertible types—higher than a closed car. One reason for this is the obvious fact that open cars are no longer in mass production, and consequently the cost in-

## GROWTH OF THE CLOSED CAR

AS PERCENT OF TOTAL PASSENGER CARS SOLD

*Chart III*

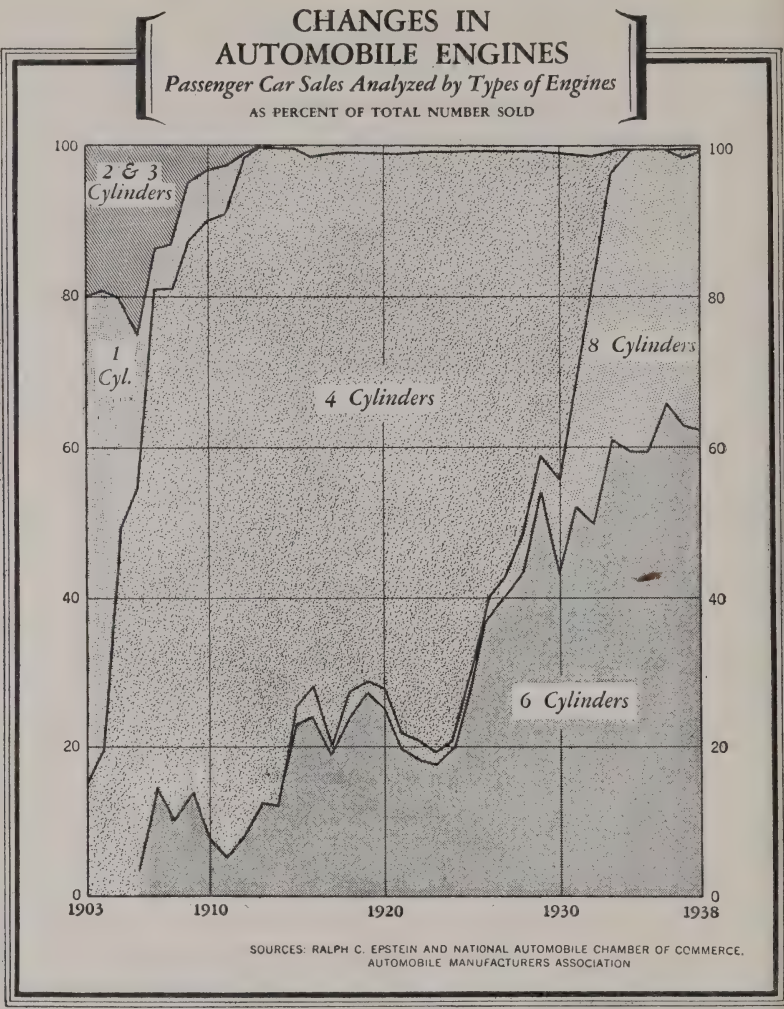


SOURCES: RALPH C. EPSTEIN AND NATIONAL AUTOMOBILE CHAMBER OF COMMERCE;  
AUTOMOBILE MANUFACTURERS ASSOCIATION

volved cannot be so readily minimized as in the case of closed cars.

On Chart IV, the changes in automobile engines have been indicated to some extent by figures on the number of cylinders. Cars operating on one, two, and three cylinders dominated the field in the early years of the century, but were rapidly displaced around 1906 by the four-cylinder car. Although the six-cylinder car came into the market very early, it did not constitute a major sector of total passenger-car sales until about 1915. Beginning in the middle twenties the six-cylinder car came forward rapidly

Chart IV

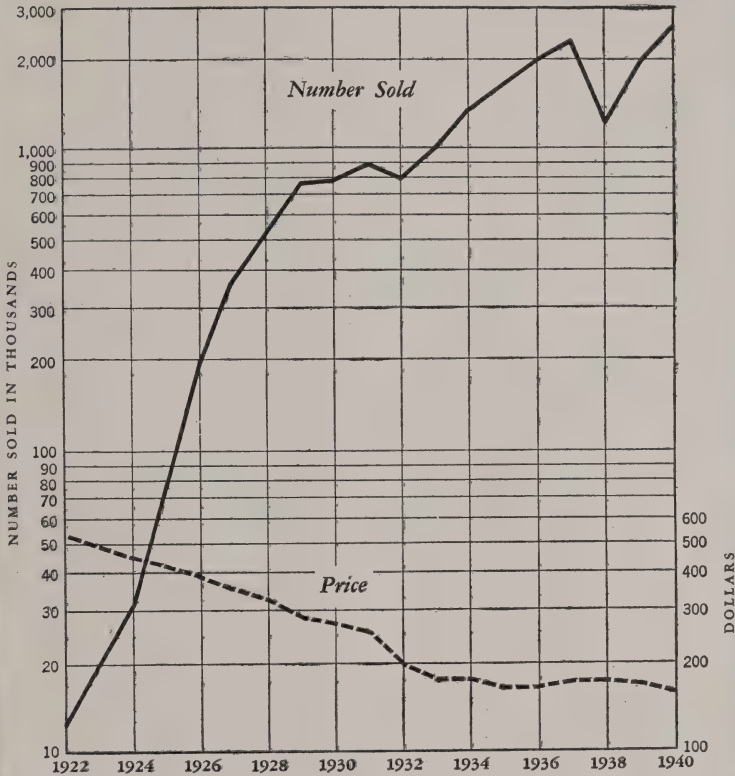


as the predominant type of engine, and in recent years more than 60 per cent of all passenger cars sold were of the six-cylinder type. The eight-cylinder car also was introduced fairly early in the century but failed to acquire an important place in the automobile market until 1930. Since 1930, the eight-cylinder car has moved into second place and the four-cylinder has been virtually eliminated. There are many opinions as to the value of these different types of engines, and it is recognized that the trends indicated in Chart IV do not in themselves prove that an engine of one type is necessarily better than an engine of



# HOUSEHOLD ELECTRIC REFRIGERATORS IN U. S.

*Number Sold - Average Retail Price*



*Chart V*

SOURCE: "AIR CONDITIONING AND REFRIGERATION NEWS" AND  
"ELECTRICAL MERCHANDISING"

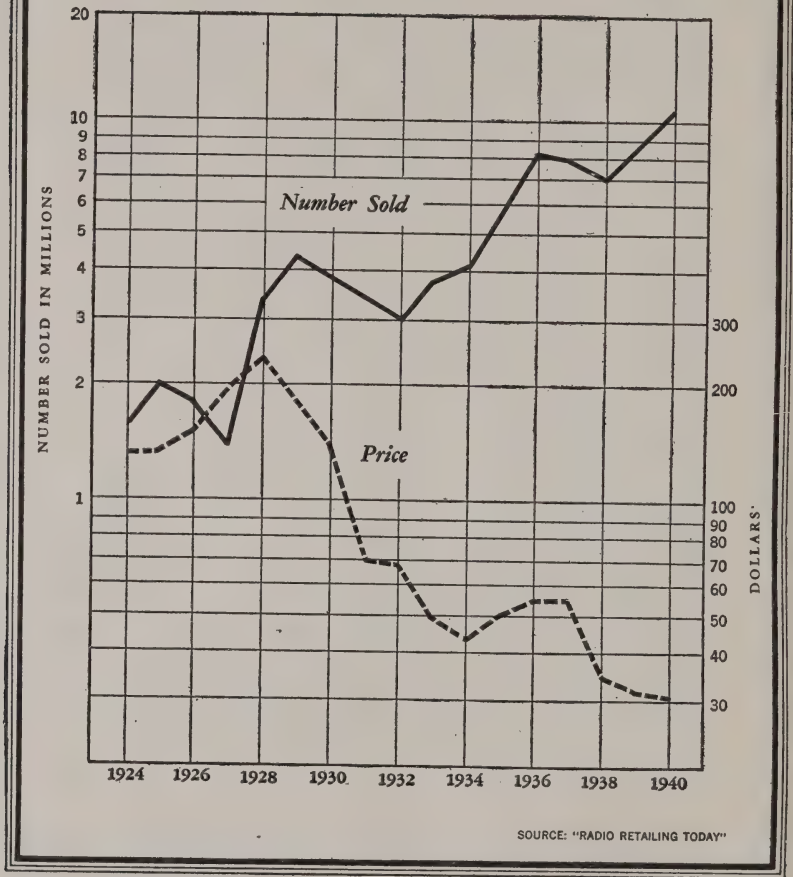
another type. However, with the six- and eight-cylinder cars making up more than 99 per cent of the total passenger cars sold in recent years, it is clear that consumer preferences have come to value these cars more highly than the older four-cylinder types. Furthermore, engineering developments and increased mechanization have made it possible to produce six- and eight-cylinder engines at much lower unit costs, relatively, than those which prevailed about 20 years ago.

An interesting and familiar group of products, for which some helpful statistical data exist, is found in the

# RADIOS IN THE U. S.

Number Sold - Average Retail Price.

Chart VI



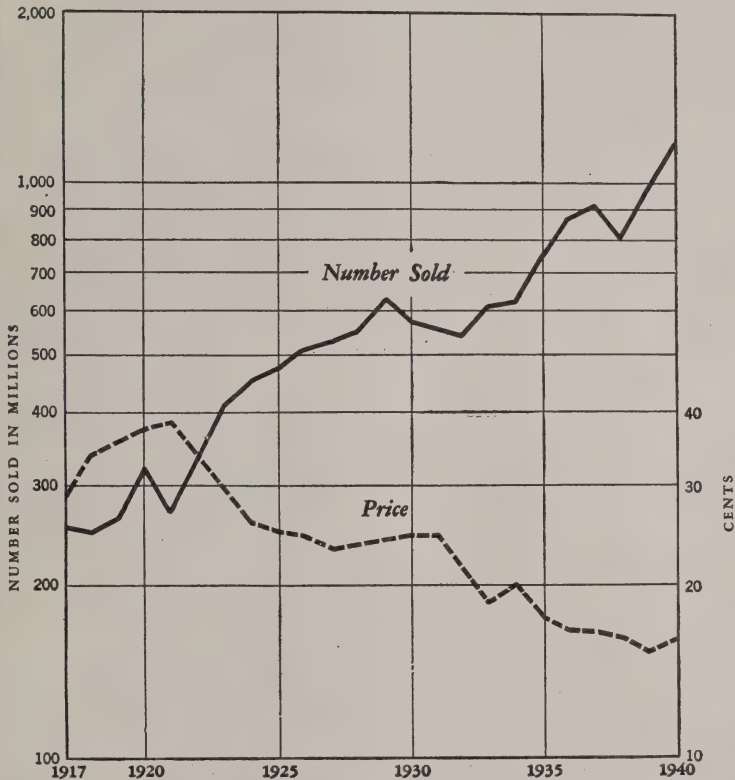
household electrical-equipment field. Charts V to VII show price and production trends for electric refrigerators, radio sets, and incandescent lamps. Like Chart I on automobiles, each of these charts gives the number of units sold and the average unit price, plotted on ratio scales to indicate the comparative rates of change. The average unit price is only a broad-gauge measurement which includes many makes, models, and sizes, but it serves to bring out the general downward trend of prices for each product in the past two decades.

In several respects the picture for electric refrigera-

# INCANDESCENT LAMPS IN U. S.

*Number Sold—Average Retail Price*

*Chart VII*



SOURCE: "ELECTRICAL MERCHANDISING"

tors (Chart V) is similar to the early growth period for automobiles. In the early twenties the producers of electric refrigerators attained a high degree of standardization in manufacturing, and this was followed by mass production and distribution with rapidly declining prices. The various makers worked toward increased durability of the product, mechanical soundness, minimum electric-power cost, minimum noise of operation, and lower prices. The factor of service facilities for refrigerators became an important consideration in the eyes of purchasers. Improvements were made in design and appearance. Various gadgets were



added; light inside the box, improved shelving, better trays for ice cubes, dials for "cold control," and special containers. Unit prices were reduced year after year as these attractive changes were developed.

The growth of installment financing of refrigerators became a fundamental influence on both price and production trends, and placed refrigerators within the reach of more and more families of moderate means. A market for used units and reconditioned units grew to considerable proportions, and trade-in allowances for old units became a factor in prices. Underlying the marketing phases of the industry, there was the factor of the increase in the number of wired homes, and also the factor of the new residential building taking place.

In the case of radio sets also, as shown on Chart VI, price and production trends over the long term reveal a strong downward trend in unit prices, accompanied by a sharp though irregular rise in the number of sets sold. Again, on Chart VII a similar interesting divergence of trends is indicated for incandescent lamps.

Each of these examples of price and production trends has a long story behind it of many different factors bearing on the trend of prices. Some of the most commonly recognized forces at work have been indicated briefly here, without any attempt to weigh the importance of each in this limited space. The possibilities for detailed discussion are almost unlimited, but statistical data on quality factors are not available to an extent that would make it possible to weigh and sift all the fundamental forces bearing on prices. The value of the charts presented here lies chiefly in calling attention to the significant end results of pricing policy in a few selected fields.

# XI

## TRANSPORTATION IN AMERICA

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### INTRODUCTION

Transportation constitutes one of the most challenging economic problems in the American competitive enterprise system. Until that problem is solved—certainly in greater degree than it has been during the past 25 years

*Transportation offers a vitally challenging*

*problem in the American competitive enterprise system.*

*Rigidities in transportation retard progress in all competitive enterprise.*

*Railroads especially face threat of disaster if present policies governing transportation are not revised.*

—the American Enterprise System cannot produce the fullest possible beneficial results for the people of this country. What is more, unless that problem is solved, it may well become the entering wedge, through the nationalization of the railroads, for the destruction of American private enterprise. Thus, in a very real sense, the future of our enterprise system to serve adequately the needs of the mass of the people depends in large part on the development of a transportation system that provides efficient, speedy, low-cost service in the postwar years.

Rigidities in transportation that reach strait-jacket proportions weigh down and retard the progress in raising standards of living of all competitive enterprise. Transportation charges represent, generally speaking, a substantial part of the total costs in agriculture, mining, manufacturing, and marketing. When such charges remain stationary or tend to increase, they take on the nature of fixed costs for industry, just as much as do interest, rents, taxes, and, lately, labor. Hence in the proportion that transportation charges contribute to the total cost of producing and selling a given commodity, to that extent they diminish the area for the play of free-market forces toward the reduction of prices, the improvement of quality, and the paying of higher wages. In a word, rigidity in transportation becomes a drag on the entire economic structure.

Frozen price levels and standards of service in transportation not only deprive consumers of the full benefit of increased efficiency in other economic endeavors, but they retard the development of our country and that ever-expanding exchange of commodities among all sections so essential to a continually rising standard of living. On the other hand, present policies governing transportation, resulting in costly, inefficient, and wasteful practices, will again, as occurred in the thirties, sap the financial life of at least several forms of transportation. Railroads in particular face this threat in the postwar years, unless our policies are radically revised. A recurrence of railroad bankruptcies and receiverships, symptomatic of the fundamental nature of their illness, will result eventually in government ownership and operation of our entire railroad system.



This threat has hung over the railroads through several score of years. Indeed, the railroads are the only industry that the government has ever attempted to operate in its entirety. No other industry has approached so realistically close to government ownership and operation. Yet, strangely enough, no concerted or prolonged effort has ever been made to achieve a fundamental cure of the organic difficulties that periodically afflict the railroads.

Should government ownership of railroads come in this country—and it is ominous that such is more than an academic threat in England today—it will not be because the American people, out of any ideological predilections, want it. Nor will it be because such a step toward national socialization offers any substantial promise of a solution of the fundamental transportation problem. Government ownership, if it comes, will be the result of the policy of drift and inaction which has marked our national attitude toward transportation for a quarter of a century.

If government ownership should come to the railroads, it would rock the entire American competitive enterprise structure. For once the process of socialization starts, none knows where it will end. Governments to survive must function—if not through skill, ability, and persuasion, then through force. Just as we saw during the war that there are no boundaries for a government regime of price control, so in operating the railroads government would bring under its control or restrictive regulation every economic activity that impinged upon its efforts to keep these and other common carriers functioning with a minimum of criticism. In a country as extensive as the United States, the economic area of such control over the years gradually would be extended until it knows no bounds. This problem, centering around the railroads, therefore, constitutes the hole in the dike against national socialism.

Action necessary to plug that hole, before all the bastion of competitive enterprise is weakened and falls, is the primary thesis of this discussion. No effort is made here to review or appraise the history of transportation from trail to stagecoach road, to canal and inland water-

*The threat of government ownership and operation hangs over the railroads.*

*This would rock the entire American competitive enterprise structure.*

*Action to avert government ownership is the primary thesis of this discussion.*

*It is a part of the national problem of streamlining our economic system to serve the needs of a country and world at peace.*

ways, to railroads, to automotive highway transit, to aviation. Able authors have written many volumes to tell this story adequately in its entirety. Here our purpose is to discuss the present and the future with only such backward glances as serve to assist in the shaping of practical principles that should govern present-day transportation needs in a competitive enterprise society. Likewise such subjects as the theory and practice of rate making, the intricacies of government regulation, and the fine achievements of all divisions of transportation during the war shall be dwelt upon only as incidents illustrating the primary thesis. Suffice to say that little criticism can be made of the manner in which our transportation system functioned during the war. But the problem that now looms before the country grows out of the difficult requirement of streamlining our economic system to serve the needs of a country and world at peace.

### *Nature of the Problem*

What, then, is this transportation problem which imperils the American enterprise system? Perhaps it can best be described by first stating the function we have a right to expect of a transportation system. Dr. Harold G. Moulton of the Brookings Institution stated that objective briefly and simply when he wrote:

*The primary requirement, according to Moulton, is that freight and passenger traffic shall move in the most economical and serviceable way.*

The primary transportation requirement may be stated very simply: We, the people, require of our transportation agencies one primary thing; namely, the movement of commodities and people in the cheapest and most efficient manner possible. In pursuit of this objective there should be no predisposition to favor any particular type of transportation agency. It is immaterial whether all traffic moves by one form of transportation or another; whether certain types of traffic are carried exclusively by some particular agency; or whether all forms of transportation are used as parts of a co-ordinated system. The primary requirement is that freight and passenger traffic shall actually move by the particular transportation agency, or combination of agencies, which can carry it, all elements of cost considered, in the most economical and serviceable way.<sup>1</sup>

Here is a yardstick whereby we can measure the adequacy of our transportation system. To state the prin-

<sup>1</sup>Fundamentals of a National Transportation Policy," *American Economic Review*, Vol. XXIV, No. 1, March 1934.

ciple is to demonstrate the shortcomings of the present system. Dr. Moulton, in the work already quoted, asserts that the net result of our haphazard and uncoordinated transportation development has been to give us "unreasonably high transportation charges, and a heavy and quite unnecessary burden upon the American taxpayer."

T. W. Van Metre, professor of transportation in the School of Business of Columbia University, in his book *Transportation in the United States*, asserts that transportation is a "sick industry" and that of all the agencies of transportation "none is sicker than the railroads." Writing in 1939, he points out:

Nearly a third of the railroad mileage is in the hands of receivers or trustees, a substantial mileage avoiding bankruptcy only through the charity of the government and the leniency of creditors; the number of employees less than half what it was a score of years ago; equipment desperately in need of replenishment, properties under-maintained, and market values, as measured by stock and bond quotations, sunk to a bare half of what they were a few years ago. Other agencies of commercial transportation are also in straitened circumstances, but they are not nearly so important as the railroads. The heart of our transportation problem is a "railroad problem," and the question which demands an answer is what are we going to do about our railroads.

This picture of the railroad situation, of course, underwent vast changes during the years of World War II. Freight demand under the necessities of war grew by leaps and bounds and the major part of the increase went to the railroads. Revenue ton-miles of freight hauled increased from 517,127 million in 1939 to 1,041 billion in 1944. Of the 1939 total the railroads hauled 355,457 million ton-miles, or 61.9 per cent, while of the 1944 total 740,000 million ton-miles or 71 per cent went to the railroads.

But this improvement in railroad business was only temporary—owing solely to war demand. The outlook for the postwar years more nearly approaches the 1939 situation than the abnormal conditions of 1944. So Prof. Van Metre's appraisal of the problem is more realistic than the wishful thinking of those who pretend that the troubles of the railroads are behind them. Actually their greatest troubles lie ahead of them, for these difficulties grow out

*Improvement  
in railroad  
business  
owing to war  
was only  
temporary.  
The railroads'  
greatest  
troubles lie  
ahead—due  
to deep-seated  
and funda-  
mental causes.*



of deep-seated and fundamental causes. He states these causes thus:

*New forms of transport have taken away irrecoverably a substantial portion of passenger and freight traffic.*

*Industrial decentralization also has reduced railroad freight transportation.*

*Another factor has been substitution of oil for coal, motors for horses, concrete for stone, steel, and lumber.*

*Transportation, as the carriage of goods, makes commerce possible.*

Railway transportation will never again have the place of commanding importance that it had in our national economy before the opening of the 20th century. In the first place, we have witnessed a technological revolution in transportation as significant and as important as the revolution for which the steam railroad itself was responsible more than a century ago. The motor vehicle and the airplane have been added to our transportation equipment and have taken traffic from the railroads which they will not recover. Half of the passenger traffic which the railroad once possessed and a substantial portion of its freight business have gone to the motor vehicle.

In the second place, there has been a decentralization of industry during the last quarter of a century which has brought about a relative decline in the demand for freight transportation. In part the decentralization has been due to the great increase in railroad freight rates which has taken place since 1920—an increase which is there despite the evidence of lower ton-mile receipts. Another reason for decentralization has been the insistence of the Interstate Commerce Commission upon the importance of distance in rate making. The successful competition of the motor carrier for short-haul traffic, which has thrown a greater and greater burden upon the long-haul rail traffic, has also been a cause of industrial decentralization, by making local distribution steadily cheaper and long-distance carriage more and more expensive.

In addition to these causes for the decline of railway prosperity, there have been changes in our domestic economy, such as the substitution of oil for coal as a fuel, of gasoline motors for horses as a source of motive power in the country and in the city, and of concrete for stone and steel and lumber in many building operations, all of which have brought about a diminution of the freight traffic of the railroads.

### *Vital Importance of Transportation*

Those of us who are not engaged in the production or distribution of goods, or in the business of transportation, are likely to think of transportation as the means by which we move about from one place to another. That is, we are inclined to identify transportation with travel. But transportation means much more than travel. It means also the carriage of goods—all kinds of goods, the products of field, mine, factory, forest, and workshop—from their places of production to their markets.

The most significant, the most indispensable, the most important activity in an organized economic society is trade or commerce, the exchange of the products of one kind of business enterprise for the products of another. Without trade, as Adam Smith pointed out long ago, there could be no division of labor; without division of labor production could never have become efficient; and so neither individuals nor nations could ever have the abundance of goods which makes them "wealthy."

Since it is trade which makes possible the application of the principle of division of labor to production, it is obvious that the only limit to the application of this principle is what Adam Smith called the "extent of the market." As the area of the market enlarges, the greater become the volume and variety of goods which can be produced.

What, more than anything else, determines the extent of the market? It is transportation. That is why, among all the many varieties of business enterprise with which we are familiar, the business of transportation is exceeded in importance by no other. That is why the history of the economic progress of the world is, in a sense, the history of the development of cheap and efficient transportation.

In the following pages no attempt will be made to cover all aspects of the science and art of transportation, or even to tell about all the numerous methods that have been employed to transport persons and goods from place to place. Our purpose is rather to point out the more important features, the "high spots," of the development of the transportation industry and to analyze a few of the most important problems now confronting those engaged in performing this function of our economy.

The United States has sometimes been called an "experiment in transportation." It was only through the amazing improvements in transportation facilities during the nineteenth century that the conquest of the continent, the westward march of the American people from the Atlantic to the Pacific, could be achieved. It was progress in transportation which made it possible to occupy and

*It mainly determines the extent of the market.*

*The history of the economic progress of the world is largely the history of the development of cheap and efficient transportation.*

*The United States has been called an experiment in transportation, and it was progress in transportation that made its growth possible.*

settle the land, exploit its resources, develop trade, and make the United State the wealthiest and most powerful nation the world has ever known.

### *A Century of Revolution in Transportation*

***Modern transportation has been developed within 150 years. The steam engine furnished motive power that men learned to apply to vehicles.***

Our modern transportation system is only a little more than a century old. The turning point in its history was the invention of the steam engine, just as this invention was the turning point in the history of many other industries. As long as man had to rely upon the limited power of his own muscles and those of his domesticated animals, or upon the uncertain and unreliable power of the winds and running waters, economic development was slow and narrowly restricted. The "extent of the market" was too circumscribed.

The steam engine set man free, giving him a moving power that was tireless and virtually unlimited in quantity. In land transportation in particular the steam engine effected an astounding revolution, opening up to occupation and intensive development parts of the earth which at one time seemed destined to remain forever closed to all industry except that of the hunter and the trapper.

In recent years the development of other moving powers, the electric motor and the internal-combustion engine, gasoline and diesel, have added immeasurably to the efficiency of our transportation system. These devices have led to the highway motor vehicle, the fast flying airplane, and the rapid-transit systems of our great urban communities. Like the steam engine, they have made transportation cheaper and better, increased the area of the "market," and vastly enlarged the opportunities for travel and for trade.

Though our modern transportation system may be said to have begun with the use of the steam engine to propel boats upon the water and to draw vehicles upon the land, we had some interesting and praiseworthy transportation facilities before the steam engine came into use. We give a brief account of the development of the American transportation system, including those facilities which preceded the steamship and the steam locomotive. In general we can divide our transportation history into five periods:

***Our transportation history may be divided into five periods, as new means were***



(1) public and toll roads, (2) canals and improved rivers, (3) steam railroads, (4) motor vehicles, (5) airplanes. Scattered along the way have been such facilities as horse cars, cable cars, electric street and interurban railways, pipe lines, and superhighways. There has been throughout all these periods a substantial parallel development of coast-wise and lake and ocean shipping.

*introduced—  
though all  
means persist  
in use.*

It must be understood that these "periods" were overlapping. We did not stop using one transportation device because another was invented. We did not quit walking after the motor car came, though it is a curious fact that during the 1920s, when the automobile industry was having its first great expansion, there was a notable decline in the consumption of shoes. We did not quit using horses when the motor truck arrived, though it is true that the apartment-house dweller in a large city is no more awakened in the morning by the "clop clop" of the milkman's horse, and on many roads in rural districts one is likely to see more horses riding in trucks than drawing vehicles along the highway. We still employ virtually all the means of transportation that have ever been known, though the older and more primitive facilities have long ago yielded their former positions of relative importance to the swiftly moving vehicles of our modern age.

### EARLY HIGHWAYS AND TURNPIKES

We now have such a highly developed system of improved highways throughout the United States that it is difficult to believe there was a time when practically all land transportation had to be provided by pack horses, because there were so few roads suitable for use by wagons or coaches. Since economic activity was largely dependent upon transportation, the early settlements were generally located on the coast and along the rivers where water transportation could be used. The inland movement of the population usually followed the navigable rivers until roads were built. Early roads frequently followed old Indian trails. They were poorly constructed and often clogged with snow and mud during the winter and spring months, making their use difficult and frequently dangerous. The

*Before steam  
transport,  
trails gave way  
to wagon  
roads*

absence of bridges in many places added to the inconvenience of poorly constructed roads. Gradually, as population moved farther inland, the trails or "tote roads" gave way to wagon roads. Travel by means of stage-coaches was made possible in the more densely settled regions, though the post roads and King's highways of colonial days were not always constructed along the routes best suited to the needs of the rapidly growing and spreading population.

*and many turnpikes were built as toll roads.*

There was an emphatic need for more roads. The demand for a more extensive and efficient transportation system became so great that it became profitable for private companies, either with or without the aid of the government, to build turnpikes, for the use of which a toll was charged. One of the earliest and most successful of the privately financed turnpikes was the road built in 1792 from Philadelphia to Lancaster, a distance of about 66 miles. The construction of this road cost approximately \$465,000. Its financial success as a private enterprise led to the formation of many companies throughout the country to construct similar toll roads. Most of these ventures, as perhaps was to be expected, were not financially successful, but they made a major contribution to the development of the country.

*The federal government built one famous highway, the Cumberland Road, which was later turned over to the states.*

Many people believed that the federal government should undertake a road-building program which would unite all the states more closely together. But because of the strict construction of the Constitution by many of our early Presidents and Congresses and courts, the federal government did but little. It did, however, construct one famous highway. This was the Cumberland Road or National Pike, which was authorized by an act of Congress in 1806. Work was started at Cumberland, Md., in 1811, and by 1838 the road was completed to Vandalia, Ill. Its construction "cost the government \$6,821,200."<sup>1</sup>

The Cumberland Road was at first "maintained from Congressional appropriations."<sup>2</sup> During Jackson's administration the road was turned over to the states

<sup>1</sup>H. U. Faulkner, *American Economic History*, 5th ed., p. 274.

<sup>2</sup>D. P. Locklin, *Economics of Transportation*, Business Publications Inc., Chicago, 1938, p. 35.

through which it passed, some of which charged a toll for its use. Although it may not be regarded by many as a great financial success from the public point of view, the road no doubt had an important part in the settlement of the Middle West. It reduced substantially the cost of shipping goods to and from that area and gave a sharp impetus to the western migration of our people.

In a few instances private roads were subsidized by the local, state, or federal government. By 1822, for example, Pennsylvania had contributed nearly 2 million dollars to the construction of turnpikes, and other states were almost as generous. Local governments also made heavy contributions, and for a while even the federal government bought stock in privately owned turnpikes. Federal participation, however, was brought to an end by President Jackson when he vetoed a bill providing for the purchase of stock in a turnpike company organized to construct a road from Maysville to Lexington in Kentucky. By that time, however, the turnpike era was drawing near an end. The public was turning to canals.

*The turnpikes were nearly all private enterprises, though some were subsidized by government.*

## CANALS

Despite the improvement of roads and the invention of the steamboat in 1807, transportation costs remained high; for many commodities, prohibitive. For further transportation the people of the United States for a time turned to artificial waterways. Although attempts were made even before the end of the eighteenth century to build canals in some sections of the country, the canal era is generally regarded as having its real beginning with the Erie Canal, which was started in 1817 and completed in 1825. Its entire original cost was about 7 million dollars. It extended from Albany to Buffalo, a distance of about 360 miles. The financial investment, cost of operation and maintenance, and gross revenue of the Erie Canal from its inception until 1882, when the collection of tolls was discontinued, were as follows:<sup>1</sup>

*A period of canal building and inland waterway improvement followed.*

<sup>1</sup> A. Barton Hepburn, *Artificial Waterways of the World*, The Macmillan Company, New York, 1914, pp. 148, 154.



*The Erie Canal (1825) was the most noted canal of this period, and for many years was operated successfully, expediting settlement of the West and making New York the greatest port.*

*Many other canals were built, usually financed by states, but most of them were financial failures, as railroads proved more efficient carriers.*

Gross revenue . . . . .	\$121,461,871
Cost of operation and maintenance . . . . .	29,270,301
Result-gain . . . . .	\$ 92,191,570
Cost of construction and improvement . . . . .	49,591,853
Balance . . . . .	\$ 42,599,717

The Erie Canal exerted a strong influence on the formulation and execution of programs for canals in other parts of the country. It reduced the time and the shipping costs between New York and the West to such an extent that it gave New York a distinct advantage over its competitors, especially Baltimore and Philadelphia. Its astounding success induced the state of Pennsylvania to construct a system of canals and portages from Philadelphia to Pittsburgh and led also to an effort to build a canal from the Potomac to the Ohio River.

Other canals were built in the East, and considerable development also took place in the West, particularly in Ohio, Indiana, and Michigan. The canal "mania" clearly indicated that there was a real earnest desire for a cheaper and more efficient transportation system. Many canals were financial failures because their volume of business was small, because they were mismanaged, or because they had been too expensive to construct. Although different methods were used to raise funds for the construction of canals, for the most part they were financed by states. In commenting upon the use of public funds Van Metre says:

Millions of dollars of public funds were expended upon these waterways virtually all of which turned out to be a total loss, for even before the canals were completed the steam railroad had demonstrated its superiority as an inland carrier. It was unfortunate for the western states that the railroad did not come into use a score of years earlier than it did.<sup>1</sup>

Locklin adds:

Between 1820 and 1840 the states incurred nearly \$200,000,000 of indebtedness. Most of this went into internal improvements—railroads, canals, and highways. Many of the canals were absolutely unwarranted. Others would have proved valuable if railroads had not appeared on the scene at about the same time.<sup>2</sup>

<sup>1</sup> T. W. Van Metre, *Transportation in the United States*, 1939, p. 28.

<sup>2</sup> Locklin, *op. cit.*, p. 29.

Despite the outcome of the early ventures in canal construction, a belief in the efficacy of this facility continued to persist. Much interest in canal transportation was aroused by the Inland Waterways Commission, appointed by President Theodore Roosevelt in 1907, to make a survey of the waterways of the country and to prepare a plan for the improvement of the river systems of the United States. There was strong advocacy of extensive improvements of the Ohio River, of the construction of a "Lakes-to-Gulf Deep Waterway," and of the reconstruction of the old Erie Canal. Traffic on this famous New York waterway had dwindled to small proportions by the end of the century, even though toll charges had been removed in 1882. It simply could not compete successfully with railroads for the traffic.

Shortly before the turn of the century sentiment arose in favor of improving the entire canal system of the state of New York. The state legislature in 1903 authorized the expenditure of 101 million dollars for improving the Erie, Champlain, and Oswego canals. In 1909 the Seneca and Cayuga canals were ordered enlarged to barge canals. These five canals were thenceforth referred to as the Barge Canal System of New York. By 1918 more than 154 million dollars in bonds had been issued to finance this development while the actual construction costs amounted to more than 176 million dollars. In 1925 Governor Smith stated that the cost including interest and maintenance had amounted to more than 273 million dollars as of June 30, 1924.<sup>1</sup> The costs to date including construction, interest, and maintenance, are much in excess of that amount. But at no time has the volume of traffic come up to the expectations of those who promoted the project.

The experience of the states and the United States with inland waterway transportation has not been altogether encouraging. The results achieved in New York by the rehabilitation of the canal system in that state were wholly disappointing, and it must be said that the many millions of dollars spent by the federal government in the improvement of our navigable rivers has not resulted in

*Attempts to revive canal systems in this century have been unprofitable. Successful canals are now those short canals which connect large bodies of water.*

<sup>1</sup> F. A. Korsmeyer, "Inland Water Transportation," *Journal of Wall Street*, Apr. 22, 1938.

any noteworthy expansion of water-borne domestic commerce. Some of the river improvements have been well worth while, in the interest of flood control, for the promotion of irrigation, and because they have made possible the development of hydroelectric power, but there is no inland waterway, either canal or improved river, constructed solely and exclusively as a transportation facility, that has justified the expenditure made upon it, except a few short canals in the Great Lakes and elsewhere which were built to improve connections between large natural bodies of water not far apart. The Soo Canals would be included in the latter category. The Panama Canal does not come within the range of this sketch, since it is not an inland waterway.

Despite this fact there are many ardent and earnest believers in the efficacy and economy of inland waterway transportation, who urge the construction of a comprehensive system of canals and river improvements. It may be that the time will come when the establishment of such a system will be advisable, but it does not seem to be so at the present time. Experience indicates unmistakably that river and canal transportation is greatly inferior to transportation on our railroads and our highways.

### RAILROADS

*The railroads began to compete with canal and river transport in the East in the 1830s, then in the West, and by 1850 were carrying over half as much tonnage as the canals.*

The first common carrier railroad in the United States was begun barely two years after the Erie Canal was opened and while the enthusiasm for canals was at a high pitch. In fact, the very day that this railroad—the historic Baltimore and Ohio—was started at Baltimore, the President of the United States, at Georgetown, a few miles away, was digging the first spadefuls of earth that marked the beginning of the construction of the ill-fated Chesapeake and Ohio Canal.

In the course of a few years every canal, every navigable river, in the country was being challenged by a parallel steam railroad. The contest was an unequal one from the beginning. One by one, canals in the Eastern and in the Midwestern states fell into disuse. Most of them have long since been filled up, and about the one thing



that indicates they ever existed is the name "Canal Street" that is still to be found in so many towns and cities. The famous old Erie Canal put up a brave struggle against the railroad and its iron horse, but eventually it too succumbed, and not even with the best efforts of modern waterway engineering science has it been able to regain its place as an important agency of transportation.

The railroad provided a better answer than the canal could make to the country's demand for cheaper, more efficient, more reliable, and, above all, speedier transportation. The railroad could overcome difficulties of topography which left the canal builder helpless; it could overcome the chill of winter which made the canal useless.

### *Private Enterprise Takes Over*

Our railroads have been built largely by private enterprise, though some of the early lines were constructed by state governments. It is barely possible that, if the state governments had not been committed so deeply to the construction of canals, the railroad system of the United States would have been started under government ownership and might conceivably have remained so. The lamentable failure of the canal may not, after all, have been an unmixed evil.

The few railroads that were constructed by the states did not achieve satisfactory results. Most of the early state lines were soon surrendered to private companies. Pennsylvania held on to its line from Philadelphia to Columbia and the line across the Allegheny Mountains between Hollidaysburg and Johnstown until 1857, when it sold them to the Pennsylvania Railroad Company to add to the line which the company had recently completed between Harrisburg and Pittsburgh.

In the early days of the railroad, when horses provided the motive power, it was looked upon as an improved kind of highway, similar to, but in the opinion of the railroad builders ever so much better than, the turnpike and the canal. The plan of operation was like that of the turnpike: the company was to own the road; the shippers and travelers were to provide their own vehicles and motive

*Some early rail lines were built by states, but our railroads have been built largely by private enterprise.*

*The first railroads were operated like turnpikes.*

power, paying the railroad company a toll for the use of the highway. With the coming of the steam engine it was obvious that this system of operation could not long endure. It was virtually impossible to use horses and steam locomotives on the same track. On the Pennsylvania State Line an effort was made to divide the time, the "wood burner" taking the morning hours, and the "hay burner" the afternoon shift. But this did not last long. Old Dobbin was too slow, and soon ruled off the road entirely. Since it was manifestly impossible for each shipper to own his own steam locomotive, and considerations of safety would not have permitted such individualization of operation, even had it been financially possible, the state began to supply the motive power as well as the highway, leaving to the shipper only the obligation of providing the vehicle. Oddly enough, this system of operation was maintained on the Pennsylvania state-owned railroad until it was sold in 1857.

*A fundamental difference between rail and other transport required a different plan of operation. Railroads had to own their own tracks, motive power, and vehicles. After some experiments this essential difference was soon recognized.*

On other, privately owned railroads, however, it early became the practice for the railroad to own track, vehicle, and motive power, and to provide a complete transportation service. The idea of toll disappeared, and the carriers charged rates designed to cover the costs of both ownership and operation. There were essential differences between railroad transportation and other forms of transportation which made different methods of operation necessary. The chief difference lay in the fact that railroad operation was on a track. Railroad trains could not meet and pass, or overtake each other and pass, at will, as boats and highway vehicles can do. It was simply not feasible to have more than one operating agency.

This fundamental distinction between railroads and other kinds of transportation persists to the present day. The railroad is the only important carrier which owns the highway, the vehicle, and the motive power. Ships and motor vehicles operate on highways which their operators do not own; even their terminal facilities are often owned and operated by other agencies. Airplanes find the air to be free, but their paths are marked by beacons and signs usually provided by public authority, and airports like-

wise are seldom owned by the organizations that fly the planes.

This difference of ownership has in recent years given rise to some difficult problems and to some acrimonious controversy. The steam railroad, owning its own highway, finds itself in competition with another privately owned carrier, which, however, is making use of facilities owned by the public, toward the construction of which the railroad itself may have made a substantial contribution. The railroad is naturally resentful that it is compelled to meet what it terms "subsidized competition." The railroad is likely, however, to overlook the fact that the ownership of its highway carries with it the privilege of exclusive use. The problem involves physical disadvantages inherent in railroad operation; it is not so easy as it may seem to be to tell where the equities lie.

### *Provision of Railroad Capital*

Once the superiority of the railroad as a carrier of freight and passengers had been demonstrated beyond question, railroad companies did not experience a great deal of difficulty in raising needed capital funds in those parts of the country where population was relatively dense and economic development well under way. In fact, at a very early date in our railroad history two or more railroads were built in some cases, where one, for the time being, would have been ample for current needs. But in the more sparsely settled districts of the Middle West, and later of the Far West, the returns promised were far too meager to make railroad construction an attractive venture to those who had capital to invest.

Yet the people of these districts, familiar with the benefits which railroads had brought to other regions and realizing keenly the need of access to markets for the products of their fields and small industries, were just as anxious to obtain the advantages of this new agency of economic progress as the people of the older and more populous communities. It was because of this need for transportation, because of a steadfast belief that the coming of the railroad meant the coming of prosperity, of

*It was easy to raise private capital for railroad building in well-settled areas, but people of other areas, too, wanted railroads.*



*Aid was furnished by federal, state, and local governments. State and local aid was mainly by stock subscription, guaranty of bonds, issue of bonds, or donations; in some cases, land grants. Right of eminent domain, monopoly, and temporary tax exemption were also granted.*

*Because of losses of public capital invested in railroads, such use of public funds was eventually discontinued.*

wealth, and a better standard of living, that the people of these Western regions began to demand that aid be given from public treasuries to railroad corporations. Government aid to railroads was widely practiced for several years, and it undoubtedly accounted for the construction of thousands of miles of railroad lines long before they would have been built had reliance been placed entirely upon the voluntary investment of private capital.

Although it is not possible to determine the extent to which the rapid growth of railroad mileage depended upon government assistance, it is clearly evident that such help was quite substantial. The problem of evaluating government help to corporations is difficult because aid was given not only by the federal and state governments but also by local governments, including cities, towns, townships, and counties. The aid of local governments appeared in various forms, but primarily in (1) subscription to the stock of the railroad, (2) guaranteeing or endorsing the railroad bond issues, (3) exchanging their own obligations for those of railroads, either with or without security, or (4) donations to the cost of construction of the railroad. State aid was similar in many respects to that given by local governments except that the state granted special privileges such as the right of eminent domain, monopoly,<sup>1</sup> and in some cases banking privileges. Tax exemptions also were granted in some cases either for a stated period or until the railroads declared a dividend. Direct financial assistance was given through stock subscriptions, loans, guarantees, and outright donations. In many cases the burden was too heavy, while in others graft and incompetence were widely prevalent. The heavy financial losses led some states to pass constitutional amendments which were designed to put an end to any further use of government funds for financing the construction of American railroads.

<sup>1</sup>"Many of the early railroads were granted monopoly privileges. The Boston and Lowell was given protection from competition for a period of thirty years, and the Western Railroad was given a somewhat similar privilege by the state. The Charleston and Hamburg Railroad was given the exclusive right to construct a railroad between Charleston and Hamburg for thirty-six years. The grant of monopoly privileges was characteristic of the earlier decades of railroad building, and was not a common practice in later decades." Locklin, *op. cit.*, p. 60.

## *Federal Land Grants*

Railroad construction received considerable aid and encouragement also from the federal government. This assistance differed somewhat in form from that of the state governments. The federal government in 1862 departed from its former policy and agreed to advance loans to railroads having projected routes to the Pacific coast. More than 64 million dollars was advanced to a limited number of companies interested in building up Pacific coast connections, most of which has been repaid. Remission of duties on imported railway iron, grants of land for rights of way and sites for depots and terminals, and even more expensive land grants were some of the forms of inducement employed to secure railway construction.

The most significant form of federal aid advanced to encourage railroad construction was that of land grants. The land-grant era extended from about 1850 to 1872.<sup>1</sup> The first land grant after 1850 was made to the Illinois Central which was to receive "a right of way 200 feet wide, and six sections" per mile. The sections were to lie alternately on either side of the road. At a later date other railroads received as a right of way a strip of land 400 feet wide, and the number of sections given was increased, varying from 10 to 40 per mile. "Actually only about 18,000 miles, or 7½ per cent of the United States railroad mileage, was so aided by federal land grants, while a much smaller mileage, mostly in Texas where the United States government owned no land, was aided by state grants."<sup>2</sup> The amount granted by the federal government to railway corporations totaled more than 132 million acres,<sup>3</sup> which was reduced to about 130 million by later readjustments.

What was the value of these grants to the railroads? The actual amount realized by the railroads is not fully ascertainable since much depends upon when and how the land was evaluated or sold. Should the value be based upon

*Federal aid was most notably in form of land grants, between 1850 and 1872.*

*The federal land grants to railroads amounted to about 130 million acres.*

*The building of railroads increased values of public*

<sup>1</sup> Land grants had been made at an earlier date as a contribution to the building of canals in Ohio and Illinois.

<sup>2</sup> Robert S. Henry, *This Fascinating Railroad Business*, Bobbs-Merrill Company, New York, 1943, p. 363.

<sup>3</sup> Locklin, *op. cit.*, p. 66.

*land and other land near by as well as of land granted to the railroads.*

*Special rates for carriage of government property and troops were required in return for land grants.*

*Railway mileage continued to increase for more than 40 years after federal land grants ceased.*

what the land could have been sold for before or after the railroads had been built? The land was naturally worth more after the roads were built than before. The land grants aided some roads materially but they were of much less importance to other railroads. Several railroads received substantial amounts by the sale of such lands. For example, the Santa Fe had realized 19 million dollars in 1916, the Great Northern 17 million dollars in 1915, Chicago & North Western 12.6 million dollars in 1917, and the Burlington in 1917, net 23.6 million dollars. The Illinois Central "is supposed to have received 30 million dollars from land sales."<sup>1</sup>

The government benefited also. The value of public land held along the railroads increased in value. The building of the roads encouraged economic development and increased the wealth of the country. In addition the railroads were required to provide transportation for the movement of troops, mail, and government property at rates considerably below the regular rates.<sup>2</sup> The land-grant rates are still in effect and for the roads concerned have become a matter of substantial financial importance.

### *The Railroad System after 1870*

Railroad mileage has been increased tremendously since the days when federal land grants were used in many parts of the country to encourage the building of new roads. Despite the fact that railroad mileage doubled during the speculative era from 1865 to 1873 (which roughly marks the end of federal land grants), the railway mileage continued to expand during each succeeding decade, up to the time of World War I, after which it began to decline.<sup>3</sup> During the period 1860 to 1890 the transcontinental lines penetrated the Far West. Railway mileage owned rose more than 40,000 miles from 1870 to 1880 and more than 70,000 miles from 1880 to 1890. Further marked increases

<sup>1</sup> Locklin, *op. cit.*, p. 68.

<sup>2</sup> Part of the section covering this subject reads: "... shall at all times transport at cost, charge, and expense in all respects of the company or corporation, or their successors or assigns, having or receiving the benefits of land grants herein made."

<sup>3</sup> A peak of 254,000 miles of road owned was reached in 1916, after which the decline set in.



were recorded during the next two decades; from 1900 to 1910, the total increase amounted to almost 47,000 miles. After 1910 the rate of increase slowed down considerably until the total mileage passed its peak.

The rapid increase in railway mileage was accompanied by a marked increase in the nation's population, which rose from about 31 million in 1860 to nearly 92 million in 1910. Industrial production showed huge increases as well. Agricultural production and other phases of our economy expanded, giving some justification for the rapid expansion of railway systems; but by 1910 railway development had reached the point where the mileage was more than adequate to take care of the needs in all except a few sections of the country.

The period from 1860 to 1890 witnessed not only a great growth in mileage but also other notable railway changes which can be only briefly referred to here. These included the use of steel rails, the standard-gauge track, and air brakes. It was the period when federal regulation had its beginning. A number of railway consolidations and mergers took place, resulting in the absorption of many short lines which were then usually operated under the names and as integral parts of the rail systems which had acquired them.

By 1943 the number of miles of railway owned in the United States had dropped to about 228,000. This decline in mileage did not mean a decline in facilities. Under the speculative forces which had been present during part of the time when roads were expanding so rapidly, duplications had appeared in many places and roads had been constructed in territories where the volume of business was too small to justify continuance. In fact, a more intensive use of facilities meant a more efficient system.

Refrigerator cars, improved Pullman service, air-conditioned trains, diesel engines, and improved methods for handling both freight and passenger traffic, all testify to the fact that the increase in mileage did not mean a decline in ability to handle an increasing volume of all types of business. During the past decade the development of streamlined trains and other improvements indicate in general what railroad management can accomplish under

*By 1910 railway mileage was adequate to meet needs of nearly all sections, and in 1916 the peak of 254,000 miles was reached.*

*Consolidations and mergers absorbed many short lines into larger systems.*

*Railway mileage had dropped to 228,000 in 1943, but this decline did not represent reduced facilities; rather it increased efficiency.*

*During the past decade great improvements have*

*been made, and an increased volume of business is handled with more speed and better service.*

*A feature of railroad organization is great investment required. Hence fixed charges are an unusually large part of costs.*

sound, constructive, and aggressive policies. Competition of other types of transportation will no doubt do much to bring about other changes in railroad transportation which will result in increased efficiency as well as greatly improved facilities for handling freight and passenger traffic. It seems reasonable to anticipate a further decline in mileage without any serious loss of facilities or any decline in efficiency for railroad systems as a whole.

### *Fixed Charges in Railroad Transportation Costs*

It is characteristic of the railroad business that a huge investment must be made in fixed plant and other facilities before any income can be realized from the road. A large part of this investment must be made regardless of the number of trains operated or the volume of traffic carried. The capital turnover is low for the reason that the capital investment is large in relation to the annual revenues. This condition explains in part why such a large part of the railroad costs is fixed rather than variable costs. A full realization of the size of the fixed investment, together with the large number of variable factors in the railroad business, will help to make clearer the problems involved in rate making.

Table 1 shows the total capitalization of Class I, II, III railroads and their lessors for two wartime periods. During World War I preferred stock increased, but common stock and funded debt decreased. From 1939 to 1944 the total capitalization of these roads decreased from 23.6 to 21.7 billion dollars in 1944. Common and preferred stock as well as funded debt declined. This table shows that funded debt accounted for about 60 per cent of the total capitalization during each of these two periods.

### *Street and Electric Railways*

An interesting development in the field of transportation was the rise and decline of street and electric railways. The demand for street-railway transportation followed shortly after the construction of the first steam railroad, and the first road of this kind appeared in New York City in 1832. It proved unsuccessful financially and

TABLE 1.—STREAM RAILWAYS (CLASSES I, II, III AND THEIR LESSORS) CAPITALIZATION  
(In millions of dollars)

Year ended	Total capitalization	Common stock	Preferred stock	Funded debt	Held by railroads		Net capitalization			
					Stock	Funded debt	Total	Stock	Funded debt	Funded debt per cent of total
June 30, 1915	21,128	7,600	1,395	12,133	2,869	1,951	16,308	6,126	10,182	62.4
June 30, 1916	21,092	7,603	1,456	12,033	2,744	2,012	16,336	6,315	10,021	61.3
Dec. 31, 1916	21,049	7,594	1,455	12,000	2,633	2,083	16,333	6,416	9,917	60.7
Dec. 31, 1917	21,249	7,454	1,848	11,947	2,719	2,128	16,402	6,583	9,819	59.9
Dec. 31, 1918	20,785	7,249	1,806	11,730	2,323	2,008	16,454	6,732	9,722	59.1
Dec. 31, 1939	23,609	8,025	2,050	13,534	3,084	2,827	17,698	6,991	10,707	60.5
Dec. 31, 1940	23,371	8,005	2,064	13,302	3,048	2,693	17,630	7,021	10,609	60.2
Dec. 31, 1941	22,952	7,832	1,980	13,140	2,808	2,576	17,568	7,004	10,564	60.1
Dec. 31, 1942	22,742	7,882	1,959	12,901	2,880	2,547	17,315	6,961	10,354	59.8
Dec. 31, 1943	22,149	7,842	1,936	12,371	2,857	2,537	16,755	6,921	9,834	58.7
Dec. 31, 1944	21,693	7,790	2,023	11,880	2,849	2,568	16,276	6,964	9,312	57.2

SOURCE: Interstate Commerce Commission, "Statistics of Railways."



*Street railways were first operated with horses, then in some cities by steam on elevated tracks. Cable cars also were introduced.*

*But during the 1890s street railways in most cities were electrically equipped, and electric interurban lines followed.*

*In 1912 there were 41,000 miles of electric railways in the United States.*

*The competition of motor-bus and private automobile reduced electric railway mileage to 17,000 in 1940.*

delayed the construction of other street railways until 1836, when one was built in Boston. Gradually the building of such lines spread to nearly all cities.

The first street-railway cars were drawn by horses but this type of power was much too slow ever to be completely satisfactory. Some experiments were made with steam power, but people in the city did not like the smell and the smoke of steam-driven street cars. Moreover, they were dangerous. New York City solved the problem in part by elevating some of her street railways. On the elevated tracks small steam locomotives could be used in safety and, since they burned anthracite, there was little smoke and smell. On surface lines, cable cars were tried out in a few cities, but they were not highly successful. The solution of the engineering problem of urban transit came with the development during the 1880s of a successful electric motor. Within a few years this device had taken the place of the horse on the surface street-railway lines, and of the steam locomotive on the elevated. Moreover, it made possible the construction of underground railways, and today it is the fast-moving trains of these subways that provide a growing portion of rapid transit in several of our largest cities.

Electric railway transportation was not for long confined to the cities. So successful was the electric car as a carrier of persons that dozens of high-speed interurban electric railways were built throughout the eastern half of the United States and in the Pacific coast states. In 1912 there were 41,065 miles of electric railways in the United States with an investment of nearly 4.6 billion dollars, employing more than 282,000 persons and transporting about 33.2 million people daily.

Then, however, the swift development of gasoline motor transportation brought stern and vigorous competition to the street and interurban lines. The "jitney" about the time of World War I offered some sensational though temporary competition; the increase of bus lines and the literally millions of privately owned motor cars forced many street and electric lines to go out of business. By 1940 the mileage of street-railway lines had shrunk to

17,000 miles and "in cities under 100,000 in population the street car had well-nigh disappeared."<sup>1</sup>

### MOTOR TRANSPORTATION

The greatest challenge to the steam railroads and to the city and suburban electric railways has come from the rapid development of motor-vehicle transportation. Except for its small beginnings in the 1890s, this has been a development of the twentieth century, and it represents truly one of the miracles of modern industrial progress.

The highway motor vehicle has effected a revolution in land transportation, a revolution as dramatic and almost as important to our economy as the revolution brought about by the invention of the steam locomotive.

It was in the carriage of persons that the motor vehicle first made itself felt. The greater part of the motorized passenger traffic, of course, is in privately owned cars, operated by their owners. In addition to millions of private cars which swarm over our streets and highways, there are thousands and thousands of passenger-carrying taxicabs and buses. The bus has largely supplanted the cars of the street railway, and competes with the passenger trains of the steam railroads. Hundreds of intercity bus lines offer frequent and convenient services which are heavily patronized. Cross-country bus lines give service from coast to coast.

The motor truck has become almost as important an agency of transportation as the passenger vehicle. Not only has it supplanted the horse for local delivery of all kinds of merchandise in nearly every community, but it has become a common carrier of undeniable importance, in many places boldly challenging and overcoming in a competitive struggle the long-dominant railroad. At the close of World War I it was frequently said that the motor truck could never carry profitably anything but high-class, valuable merchandise, and not even that for distances in excess of 50 miles. In less than a score of years, it has demonstrated its ability to carry all kinds of freight, with no limit to the distance over which it could operate. The

*The development of the motor car has been an industrial miracle and has worked a revolution in land transportation.*

*It made headway first in passenger traffic, with private cars, taxicabs, and buses.*

*Then the motor truck took over local deliveries and entered into competition with railroads as a freight carrier.*

<sup>1</sup>*The Growth of the American Economy* (H. F. Williamson, ed.), p. 547.

steam railroad is still our most important carrier of both passengers and freight, but it no longer occupies the dominating position in our transportation system that it held at the close of the nineteenth century.

### *Government Aid to Motor Transport*

***Government—local, state, and national—has aided motor transport heavily by providing and maintaining suitable highways.***

***Vast public expenditures for this purpose have been financed by gasoline and other motor-vehicle taxes.***

The government—local, state, and federal—has contributed heavily to the development of transportation by motor vehicles by providing and maintaining the highways over which these vehicles operate.

Although substantial financial assistance<sup>1</sup> has been afforded by the federal government, highway construction has been financed chiefly by state, county, and local governments. The production of cars, trucks, and buses has been financed by private capital just as were the railroads, without subsidies or special government aid.

The financing of highway construction has taken various forms. State and local authorities have used local and state bond issues and also a substantial amount of funds

<sup>1</sup> In 1916 a federal aid law was enacted by Congress, entitled "An act to provide that the United States shall aid the states in the construction of rural post roads and for other purposes." This act authorized the federal government to provide funds to aid in highway improvement up to 50 per cent of the cost. Such aid as was given by the federal government was to be carried out in cooperation with state highway departments. "This act was supplemented by legislation in 1921. Practically all of the federal-aid mileage is included within the state system." — Locklin, *op. cit.*, pp. 751-752.

"From 1916 to the beginning of the present war, highway transportation increased enormously in volume. In the same period highway construction resulting from federal legislation supplemented by work done by states without federal assistance and by local communities created a system that was carrying more passenger-miles per annum than all of the other transportation facilities combined.

"Passenger travel (in 1940) in private automobiles on the rural highway system amounted to 244,000,000,000 passenger-miles, commercial buses accounted for 12,000,000,000. Total rural passenger traffic was 256,000,000,000 (about 90 per cent) out of a national total of 282,000,000,000 passenger-miles of travel exclusive of travel in cities.

"The same is not true of course of ton-miles freight. The railroads retain supremacy; the 1940 ton-miles carried by the railroads was 373,000,000,000; and on the rural highways we had 59,000,000,000 ton-miles of freight traffic.

"From 1915 to 1942, the federal government spent \$3,391 million for public highway construction and \$4,199 million in work relief on public highways, or a total of \$7,590 million." — Thomas H. MacDonald, Commissioner of Public Roads on Federal Aid for Post-war Highway Construction, Hearings before Committee on Roads, H. R. 78th Congress, 2d Session, on H. R. 2426, Vol. II, Mar., Apr., and May 1944, pp. 946-951.



derived from general taxes. Gasoline taxes and motor-car license fees have provided substantial funds for highway building and at the same time have served to shift the costs to the users of the highways in considerable degree.

The amounts spent by various states have varied considerably from year to year. The amount of expenditures reported by the various states for highways was more than 803 million dollars in 1930, 936 million dollars in 1940, and 798 million dollars in 1943.<sup>1</sup> The amount of public expenditures by the United States for highway construction for these same years was reported to be 1,481 million, 896 million, and 457 million dollars, respectively.<sup>2</sup>

From 1917 to 1940, the annual authorizations of federal funds for road purposes amounted to 3,435 million dollars which included 350 million for grade-crossing removal. Total expenditures on state highways, including federal funds, amounted in 12 years (1921-1932) to 7,867 million dollars, and on county and local roads 7,053 million dollars or a total of 14,920 million dollars. During the same period 7,361 million dollars were spent on streets which made a grand total of "approximately \$22 billion . . . used for highway and street purposes."<sup>3</sup>

The number of passenger cars registered jumped from 4.7 million in 1917 to 29.5 million in 1941. During the same period the number of truck registrations rose from 0.33 million in 1917 to 4.9 in 1941.<sup>4</sup> The registrations of both types have since 1942 showed declines, the percentage of decline being much greater in the number of passenger cars than in the number of motor trucks.

*Total expenditures on highways and streets in 12 years (1921-1932) were 22 billion dollars.*

*Registration of passenger cars reached 29.5 million in 1941; of trucks, 4.9 million.*

## AIR TRANSPORTATION

The most recent form of transportation to be developed on a national basis in the United States is air transport, chiefly used to carry mail, passengers, and express. Though the Wright brothers made the first successful airplane flight in December 1903, air transportation did not

*Air transport did not make rapid progress in the United States until the*

<sup>1</sup> *Economic Almanac* for 1944-1945, p. 121.

<sup>2</sup> *Ibid.*, p. 277.

<sup>3</sup> *Public Aid to Transportation*, Federal Coordinator of Transportation, 1939, Vol. IV, pp. 10-11.

<sup>4</sup> *Automobile Facts and Figures*, 1943, p. 48.

*1930s, when government aid led to establishment of several air lines.*

*Plane-miles flown increased from 32 million in 1930 to 133 million in 1941; passenger-miles from 84 million to 1,492 million.*

*Manufacture of planes, equipment, and operating services have been private enterprises, but airports have been provided mostly by government, also lighting of airways.*

develop so rapidly in the United States as in Europe, probably because there was insufficient aid and encouragement on the part of the government. Favorable legislation during the twenties and early thirties, providing generous compensation for the transportation of the mail, led to the establishment of several air lines, and, by the time World War II broke out, air transportation in the United States was making rapid and healthy progress.

The number of domestic plane miles flown advanced from 32 million in 1930 to 133 million in 1941, or an increase of more than 300 per cent. During the same period of time passenger-miles increased from 84.1 to 1,491.7 million and mail ton-miles rose from 3.1 to 12.9 million. There was a decrease during the years 1942 and 1943 in the number of plane miles flown and the number of passengers carried, but mail ton-miles continued to increase, reaching 28.3 million in 1943. The number of miles of commercial airways decreased from 47,700 in 1941 to 36,400 in 1942.<sup>1</sup> The changes in the number of plane-miles flown and the number of passengers carried were due in considerable part to the heavy demands made upon air-line companies by the Army and Navy.

The development of air transportation has followed the pattern set by highway transportation rather than that set by railroad transportation. The manufacture of planes and equipment has been a private enterprise, and so has the operation of the air services. On the other hand, the construction and maintenance of airports have been, for the most part, a function of government, usually of local government. The federal government has aided the development of air transportation by generous payments for mail service, and by the provision of lighted airways to permit night flying. The investment in American air transport was estimated in 1941 as follows:

Air-line companies <sup>1</sup> (total net assets)	\$ 86,756,000
Airways <sup>2</sup>	18,500,000
Airports and intermediate fields <sup>2</sup> (1938)	326,000,000

<sup>1</sup> Sorrell, Lewis C., "Air Transport Industries in Wartime," *Annals of American Academy*, Nov. 1943, p. 81.  
<sup>2</sup> *Public Aid to Transportation*, Federal Coordinator of Transportation, 1939, Vol. I, pp. 152-153.

<sup>1</sup> *Initial Study of Air Transportation*, Association of American Railroads, January 1944, p. 22.

Investment by air-line companies rose to \$122,121,000 in 1942. The data for airports and airfields are estimates for the year ending Dec. 31, 1938. Of the 326 million dollars' investment, 62 per cent or almost 202 million dollars was publicly owned.

The primary advantage which air transport has over other forms of transportation is speed. It can cover in a short time distances which took many hours or days to cover by other means. Perhaps it cannot provide an economic service in the handling of most types of freight and express. It is also more hazardous, although the hazardous nature of the business will be largely eliminated as time goes on and improvements are made in the type and structure of airplanes and more experience is accumulated in the problems of operation. Although expansion and growth have been rapid in recent years, the total of traffic carried by air transport is still small in comparison with the total volume carried by all other transportation agencies.

The expansion of this form of transportation is indicated by the increase in the number of passengers carried and the pounds of freight, express, and mail carried, as shown in Table 8.

### SIZE AND SCOPE OF TRANSPORTATION SYSTEM

Since transportation plays such an important role in our economic and commercial life, it is desirable to consider the size and scope of our domestic transportation system. Although it is not possible to present a complete picture of our transportation system by statistical data, its magnitude may be indicated.

The various agencies which carry the bulk of our domestic traffic have an extensive mileage. In 1942, there were about 3 million miles<sup>1</sup> of highway in the United States and 230,000 miles of steam railroad line, which is of course much less than the number of miles of track. Electric railways had 23,770 miles of single track in 1937, consisting of: city and suburban, 13,661; interurban, 3,464; and city, suburban, and interurban combinations,

*Air transport has the primary advantage of speed but has some limitations in carriage of freight and express.*

*Total air traffic is still small in comparison with that of all other transportation agencies.*

*In summary, for land transport the United States has 3 million miles of highways, over 250,000 miles*

<sup>1</sup> *Automobile Facts and Figures, 1943, 1944.*



*of rail lines,  
over 200,000  
miles of pipe  
lines, over  
47,000 miles of  
domestic air-  
ways in opera-  
tion.*

6,645 miles. There was a substantial mileage of navigable lakes, rivers, and coastal waters for water-borne traffic. In 1941 there were 132,302<sup>1</sup> miles of oil pipe lines in the United States, of which 120,102 miles were used for crude petroleum and the remainder (12,200 miles) for refined petroleum products. The 120,102 miles were classified: 55,940 as gathering lines and 64,162 trunk lines. Natural-gas pipe lines add about 100,000 miles to the oil total. Domestic air lines were operating over 47,000 miles<sup>2</sup> of airways in 1941.

The volume of passenger traffic may be measured in terms of passenger-miles. In 1942 total inter- and intra-city passenger traffic amounted to almost 555,000 million passenger-miles, or over 4,000 miles for each person in the United States. Of this amount, private automobiles accounted for some 400,000 million miles, or approximately 3,000 miles per person.

The volume of freight traffic handled may be measured in terms of the number of ton-miles. Of the 935,000 million ton-miles of freight carried in 1942, including mail and express, railways carried 646,000 million ton-miles, or 69 per cent of the total. The remainder was distributed as follows: inland waterways (including Great Lakes) 157,000, pipe lines 71,000, and highways 61,000 million ton-miles.

### RAILROAD RATES AND CHARGES

There are few pricing problems which have presented as many difficulties, both practical and theoretical, as the pricing of the services of transportation agencies and other public utilities. The difficulties are present whether the pricing takes place with government regulation or without it.

In the following discussion, we will limit ourselves to the problem of railroad rates and charges. To a large extent, the practices and principles we shall consider are common to all forms of transportation enterprise. We will confine ourselves to railroad rates, because it is in connec-

<sup>1</sup>U.S. Bureau of Mines.

<sup>2</sup>*Ibid.*

*In the trans-  
portation field,  
have been sub-  
railroad rates  
ject to most*

tion with these rates that the pricing problems have emerged most plainly, and railroad rates have been the subject of wider discussion, more controversy, and more interference on the part of the government.

*controversy and regulation, and have disclosed most clearly the problems involved in pricing public-utility services.*

### *"Supply-and-demand" Rate Making*

In the beginning years of steam railroad transportation, rates were made much as the prices on other goods or services were made. It was a matter of supply and demand, of struggle in the market between buyer and seller.

Some of our earliest railroads had a virtual monopoly. They were too greatly superior to the canal or the stagecoach to be fearful of the competition of those agencies. Moreover, many early railroads were built where there was no canal or river competition, only that of the slow wagon and stagecoach.

*At first railroad rates were made on a "supply-and-demand" basis, like prices of other goods and services.*

The owner of a railroad which possessed a monopoly of the only kind of transportation in which the public had a large degree of interest had a position of high advantage in bargaining over prices. He could fix his price—if he chose to do so—at the amount which the prospective shipper or traveler would pay rather than do without the service. In other words, he could charge the "value of the service."

*The "value of the service" to the buyer, or "what the traffic will bear," was the main factor if the railroad had a monopolistic position.*

If this value of the service was substantially above the cost of producing the service sold—the "cost of service" we shall call it—the owner of the railroad was in a position to reap a handsome profit on his enterprise. Usually he would not be too greedy. He would not try to charge *all* of the value of the service. There might be danger of killing the goose. He wanted his customers to prosper, for, as their business grew, his business would grow too. Profits were as necessary to them as to him.

As might be expected, some of the early railroads were highly profitable. Many of them paid for themselves in the course of a few years of operation. Under such circumstances it was inevitable that rivals would enter the field, and soon there would be not one railroad, but two or perhaps three, all seeking the patronage of the same travelers and shippers. The monopoly of the pioneer builder

*But the monopoly of the pioneer builders, if profitable, was broken into by rivals sooner or later,*

*and rates became competitive.*

disappeared, and he now found that in bargaining with his customers he might not be able to exact the value of the service. He had to meet competition, not the competition of a wagon or stagecoach, but the competition of another railroad as eager for traffic as he was himself. Now he must take into consideration not only the price which a buyer might be willing to pay, but the price at which a competitor would be willing to sell.

### *Heavy Fixed Costs Required Large Traffic Volume*

*For railroads, the cost of hauling declines as volume increases.*

As price competition among rival railroads began to develop, some interesting facts began to emerge about the railroad transportation business. The first of these facts, which was to engage the attention of economists for many a day, was that the railroad business, under ordinary circumstances, was a "business of decreasing costs" or, what is the same thing, a "business of increasing returns." What did this mean? It meant that up to the point of "saturation" (that is, the point where it was impossible for the railroad to carry any more traffic), as traffic increased in volume, the cost per unit of hauling declined. Consequently, the larger the traffic, at the same rates, the greater were the profits to be enjoyed. Why was this?

This was due to the second fact discovered about the railroad business. As we have noted earlier, its costs consisted very largely of what we call "fixed costs"—costs which were the same, regardless of the volume of traffic. It was only the "variable" or out-of-pocket costs which fluctuated upward and downward with the rise and fall of business.

*This is accentuated by the heavy fixed costs of railroads, both capital and operating costs.*

These fixed costs consisted not only of capital costs—the interest to be allowed for by reason of investment in road and equipment. A part of the operating costs also was fixed, and did not change with the variations in the volume of traffic. For example, it cost just as much to pay the crew of an engine that drew 5 loaded cars as to pay the crew if the engine drew 10 or 20 loaded cars. The costs of upkeep of track and cars were largely independent of the volume of traffic. It was weather—frost, snow, and rain—that caused the ballast to heave and wash away; it was rust that



destroyed iron, whether it was in use or not; paint on cars blistered and peeled away, regardless of whether the car was moving under a full paying load.

Railroading was expensive. It took a lot of money to grade the roadbed, to buy ties and rails and ballast, to build bridges and tunnels, to buy the freight and passenger cars and the iron locomotives. It cost money, too, to operate a railroad. And the big outstanding fact was that so much of the cost of building and running a railroad kept right on piling up, whether the railroad was doing a big business or a small one.

Under the circumstances it behooved the railroad owner to get out and hustle for all the business he could find. He often found it better to charge somewhat less than the full value of the service, if by so doing he could encourage the growth of his business.

### *Competition Brought Cutthroat Rate Cutting*

When competing railroads entered the field there was a tumultuous scramble. Each owner was under the temptation to cut rates to attract traffic from his competitors, because each knew that a large traffic at moderate rates was more profitable than a small traffic at discouragingly high rates. Those high fixed charges exerted a constant, compelling pressure.

When rate cutting began, it was difficult to say when it would stop. Railroad owners found out another interesting fact about the railroad business—a fact which dogs all business in which the element of fixed costs is large. It may be at times *that it is less disadvantageous to do business at a loss than to do no business at all*. How can this possibly happen? It is that matter of fixed costs again. If one stops doing business altogether, those fixed costs, or a substantial part of them, keep right on going. The interest on the heavy investment, the depreciation of roadbed and other property—such costs cannot be avoided. If the owner of the railroad, by continuing operation, can cover his variable costs, and pay, say, half his fixed costs, he is better off than if he stopped operation altogether and suffered the loss of all his fixed costs. Here is the paradox,

*On account of heavy costs, owners were often eager to get volume, even if full "value of service" was not obtained.*

*When competition came, the temptation to cut rates was irresistible.*

*It happened often that rate cutting would involve all competitors in losses, some in bankruptcy.*

*Discriminatory rates at competitive points became common.*

*So carriers inevitably got together to avoid crippling losses and made rates by the "conference" method.*

*They tried to maintain these rates by pooling competitive traffic or revenue from it.*

*When pools were declared illegal, other devices were*

because just as in much other modern business enterprise there is a large investment in fixed capital equipment and fixed costs are heavy.

It frequently happened in the early days of railroad competition that eager and ambitious rivals would cut rates to such an extent that they all failed by a wide margin to earn their entire costs of operation. Some roads might be forced into bankruptcy, but then they were in all the better position to carry on the warfare for a time, since they did not have to worry about meeting interest payments.

It was the shipper at "competitive points" who profited by this "cutthroat" competition. At many non-competitive points the warring carriers were under no pressure to reduce rates, and they might even raise rates, in an effort to recoup in part the severe losses suffered because of the intense competition at other places. "Discriminatory rates" became common in the railroad business, rates showing such differences from other rates as could in no way be justified by differences in costs.

### *The "Conference" Method Adopted*

It was inevitable, under the competitive conditions which came to permeate the entire railroad industry, that the carriers should eventually try to "get together" to avoid their crippling losses. And get together they did. They arranged a truce in the areas where cutthroat competition and discrimination had become prevalent, and, sitting amicably about a table, they began to make rates by the "conference" method.

Various devices were employed to bring about the maintenance of the rates agreed upon in conference. The first such device was the *pool*, by which either the competitive traffic or the revenue from such traffic was divided among the competing lines in a manner agreed upon by all the competitors. When pools were made illegal by statute, the carriers turned to formal rate agreements, with efforts to enforce them by suitable self-imposed penalties. When these agreements were declared to be illegal under the anti-trust laws, the carriers resorted to consolidation, "commu-

nities of interest," and other forms of "combination." Unrestricted competition, with its devastating losses, could not be tolerated; such competition carried the seeds of its own extinction.

The making of rates by the conference method did not always put an end to discrimination, even if it did tend to stabilize rates and remove the violent fluctuations that had characterized the days of cutthroat competition. Competitive points were able to exert pressure to retain a part of the concessions with which they had become familiar; sometimes large shippers received special consideration, giving them an advantage over their small competitors; and in many places special rates were granted as a means of meeting the competition of some other kind of carrier.

The most common example of discrimination employed to meet the competition of another carrier was that which occurred when railroads found themselves confronted by the rivalry of water carriers. Port-to-port rates were cut to meet the water rates, but the railroad did not find it necessary to reduce the rates to intermediate points which had no competitive service by water. Thus the "long-and-short-haul" problem came into being, from the practice of charging more for the short haul than for the long haul, over the same route and in the same direction.

A few years of experience with rate making by the conference method brought into effect a number of rate "structures." Rates in different parts of the country were made after a definite pattern, the character of which depended upon the competitive forces which operated in each district or region. These old rate patterns have for the most part been obliterated, but it might not be amiss to discuss one or two of them briefly.

In the South the railroads established the so-called "basing-point" system of freight rates. Water competition was common throughout the South. The outstanding characteristic of the basing-point system, therefore, was the widespread discrimination of the long-and-short-haul variety. Selected commercial and industrial centers, designated as basing points, had low rates, while intermediate points had higher rates.

*used, but discrimination was not eliminated.*

*To meet water competition, the discrimination between long and short hauls was established.*

*Among rate patterns developed by conference were regional schedules adjusted to competitive forces operating in each region.*

*The "basing-point" system and trans-continental "blanket" rating were examples.*



Another interesting rate pattern was the huge "blanket" rate on transcontinental traffic. At one time all points east of the Missouri River, and a few farther west had precisely the same rates to transcontinental destinations west of the Rocky Mountain highland. The rates to the coast terminal points were lower than to the intermediate points, because of water competition, but from eastern points of origin the "blanket" was observed whether the traffic moved to the coast or to the intermediate destinations. It used to be said that the railroads carried traffic from New York to Kansas City for nothing and charged for it the rest of the way, since the rate from Kansas City to the Pacific coast was the same as the rate from New York.

*Aberrations of rates were not so great in East as in South and West.*

In the East the aberrations of rates were not so great as in the West and South. Rates varied largely according to distance, and there were no outstanding long-and-short-haul discriminations. The rate between New York and Chicago was the yardstick by which all other rates between New England and the Middle Atlantic states, on one side, and the eastern portion of the Central states, on the other side, were measured. Boston and all the rest of New England enjoyed the same rates to the Middle West that New York had. Philadelphia and Baltimore, New York's other rival ports, had slightly lower rates to the Middle West, but not so much lower as the difference in distance would have justified, had rates been based exclusively upon distance.

### *The Federal Government Undertakes Regulation*

*Dissatisfaction with rates and discriminatory practices created pressure upon state legislatures for regulation, especially in the West.*

Though the railroads succeeded in bringing their bitter competitive warfare to an end, they did not establish a system of rates which gave general public satisfaction. In fact, there was a great deal of indignant resentment in many parts of the country, especially in the agricultural regions of the West, at what were thought to be unfair and discriminatory railroad charges. This indignation eventually found expression in legislation designed to regulate railroad rates.

The first regulatory laws were enacted by the states. The railroads promptly challenged the constitutionality

of these laws, on the theory that they were being deprived of their property "without due process of law," and that the laws impaired the "obligation of a contract" embodied in the railroad charters. In a series of notable decisions the Supreme Court for a time upheld the authority of state legislatures to regulate railroad rates, though it declared this right not to be "without limit"; in other words, legislative authority could not destroy the railroads under the guise of regulation; it could not make rates so low as to confiscate the railroads' property.

Only a few states enacted effective laws for the regulation of railroad rates. In 1886 the Supreme Court declared that under no circumstances could the states regulate rates on interstate railroad traffic. There was an insistent demand that Congress undertake the regulation of interstate railroad rates, and, finally yielding to this pressure, Congress enacted, in 1887, the Act to Regulate Commerce. This is the law which with many amendments is now known as the Interstate Commerce Act, though a better name for it would be the Interstate Transportation Act, since it deals almost exclusively with transportation, and not with all forms of commerce.

The principle embodied in the law, with respect to railroad rates, was very simple, and it still remains the same. It is, briefly, that rates must be "reasonable" and not "unduly discriminatory." The law did not endeavor to define a reasonable rate, nor say when a discrimination was "undue." This was left to an administrative bureau which the law created, known as the Interstate Commerce Commission.

As the law was originally written, the Commission, while it had authority to declare a rate or a rate structure to be unreasonable, or unduly discriminatory, did not have the authority to correct an illegal rate. Over the years that have elapsed since 1887, the Interstate Commerce Act has been greatly modified. The Commission received the power to make rates to take the place of those which it declared to be unreasonable or unduly discriminatory. It can name the maximum and the minimum rates which the railroads may charge; it can suspend proposed changes in rates, thereby preventing the carriers from arbitrarily putting

*State regulatory legislation was at first upheld by the courts.*

*Since state regulation was not generally effective, and the Supreme Court forbade state regulation of rates involving interstate commerce, Congress enacted (1887) first Interstate Commerce Act.*

*It set up the Interstate Commerce Commission.*

*Eventually the Commission was given power to make rates, maximum and minimum; to suspend proposed changes; to require joint rates; and to exercise various other powers over railroads.*

*The Commission's authority over rates now extends to motor vehicles, domestic water carriers, and pipe lines, in interstate commerce.*

*The Commission was disposed for a time to give consideration to factors that had operated in previous rate making.*

*But gradually it came to use mainly the yardstick of "cost of serv-*

into effect rates that are too high or too low. It can require railroads to enter into joint rates, and, if need be, determine how the revenue derived from such rates is to be divided. It has many other powers over railroads, such as authority over capitalization, over construction, over leases, sales, and other forms of consolidation—but we are interested here in its authority over railroad rates. In passing, it may be added that the Commission's authority over rates now extends to motor vehicles, to domestic water carriers, to freight forwarders, and to pipe lines, in other words, to all domestic common carriers except aircraft.

### *The Interstate Commerce Commission Evolves a Yardstick*

After the Interstate Commerce Commission received authority to correct rates which it believed to be contrary to the law, rate-making practices in the United States began to change. The Commission was not disposed, at first, to disregard the competitive forces which had been so powerful in determining the patterns of railroad rates. Neither was it bent upon neglecting those other factors which had exerted a strong influence upon rate making, factors such as the value of the service. The Commission even took the position that the value of the commodities should be taken into consideration in making rates, and conceded that other things being equal there was some justification for imposing higher rates upon the more valuable articles of traffic, because these articles could "stand" the higher charges.

But the Commission was under injunction, in rate controversies, to see that rates should be "reasonable" and that whatever discrimination might be practiced should not be of an "undue" character. It had to adopt some theory, some principle of rate making. It had to find answers to the questions: What is a reasonable rate? When does a discrimination become "undue"?

Over the years the Commission has unquestionably come more and more nearly to the opinion that, all things considered, the best yardstick to use in arriving at a decision as to the unreasonableness or the unduly discriminatory character of a rate is the "cost of service." In this



has been upheld by the courts, which have frequently given expression to the belief that the proper measure of a reasonable rate is the cost of service. Congress, too, has taken the position that railroad rates should be sufficient to cover the costs of railroad operation under economical and efficient management.

In 1920, as a matter of fact, Congress adopted a "rule of rate making," by which it directed the Interstate Commerce Commission to establish and maintain a railroad rate structure which would give the railroads as a whole a fair return upon the value of their property employed in the service of transportation. This is of course the cost-of-service principle. Rates should cover all costs, first operating costs, and then enough left over to meet capital costs—not necessarily the interest on investment because there might have been improvident expenditures, but a return upon the value of the capital equipment used for public service. This fair return is what the Supreme Court had long held the railroads to be entitled to, in its judgment of the limits of government regulation. That is, if economic conditions were such as to enable the railroads to earn a fair return, they should not be deprived of the opportunity by government action. Not even the Supreme Court could guarantee the railroads a fair return, if business conditions were so depressed that it would be impossible for the railroads to earn it, whatever rates were charged.

### *"Cost-of-service" Yardstick Difficult to Apply*

There were certain difficulties involved in the administration of this rule. In the first place no acceptable general method of valuation of railroad property was devised, though the Commission spent a large sum of money in making an inventory of railroad property. In the second place, it was clearly impossible to predict the volume of railroad business, and consequently no assurance that a given body of rates would produce the expected fair return. Congress finally repealed the 1920 rule of rate making, and replaced it with one in which the language is not so precise and definite. But the Commission still feels

*ice," and the courts have upheld this criterion.*

*Congress in 1920 adopted a rule for rate making incorporating the "cost-of-service" principle, including fair return on the value of capital equipment.*

*Valuation of railroad property proved to be difficult, and volume of traffic impossible to predict; so "cost of service" is an uncertain yardstick.*

that it is duty bound to see that the railroads, if possible, obtain adequate revenues, and by and large the adequacy of the revenue is still a matter of the amount of "return" a railroad is able to earn. And nobody can deny that unless the earning capacity of a railroad is sustained, it finds it difficult to get new capital on reasonable terms.

This current rule of rate making, however, applies the cost-of-service principle to the entire revenue of the railroads. It is the rule which is invoked when the "level" of rates is to be raised or lowered, when there is to be a general increase or decrease affecting all railroad traffic or a substantial part of it.

*This yardstick is especially difficult to apply to rates on single or small groups of commodities.*

The Commission meets a more intricate problem when it deals with the rates on individual articles which the railroads carry. Here the application of the cost-of-service principle is not so easy. Nevertheless, even in the regulation of rates on single commodities or comparatively small groups of commodities, the Commission has, over the years, come to show more and more faith in cost of service as the correct standard of reasonableness of railroad rates.

It is impossible for anybody to determine the *exact* cost of hauling any particular item of railroad traffic. This is true because much of the costs of railroad operation cannot be applied to individual shipments. Railroad costs are largely joint costs. The same railroad carries both freight and passengers, as well as mail and express, and in its freight shipments it finds literally thousands of different commodities, varying in weight, bulk, shape, value, density, and degree of fragility. It is obviously impossible to say with mathematical accuracy what portion of the expenses for fuel, track maintenance, train crew wages, salaries of general officers, signaling, in fact, what portion of any operating expense, shall be specifically assigned to each particular shipment.

Then the fixed costs bob up again. What would have been the difference in cost if some particular item of traffic had not been carried at all? If you missed your train, how much expense did the railroad save? A little reflection on such questions makes it entirely clear that it is quite impossible to ascertain the cost of hauling any particular traveler or shipment of freight. Yet the costs are ever

present, and fairness demands that each passenger and each shipment should bear a reasonable portion of the total. And in its policy of rate regulation the Commission has held ever more closely to the theory that each item of traffic should bear its fair share of the burden of costs. How can it be made to do so?

It is not so much a matter of exact cost, or total cost, but of relative cost. It is a matter of less or more. In other words, reasonableness demands that a transportation service that costs more than another should bear a higher charge. Reasonableness of rates becomes largely a matter of comparison. If, for good reason, the Commission comes to the opinion that it should permit different rates on certain articles of traffic, which do not reflect obvious differences in costs, the resulting discrimination—for discrimination it is—should not be permitted to be so great as to be considered “undue.”

The application of this principle of relative cost is to be found throughout the entire railroad rate structure. For example, less-than-carload shipments usually carry a higher rate per 100 pounds than carload shipments of the same articles. Why? Because it costs more per 100 pounds to carry the smaller shipments, especially when additional switching is required. Higher rates are charged also, as a rule, on articles that require special equipment or protective service.

### *How Freight Rates Are Adjusted*

The most important cost factors in the transportation of freight are weight in proportion to bulk and distance to destination. For passengers the factor to which consideration is given is simply distance. Our passenger fares are so much a mile, except in the case of excursion or commutation fares. Pullman passengers pay the railroad more than coach passengers, because it costs the railroad more to carry them, but the fare is still so much a mile.

In general there are two kinds of freight rates, that is, two kinds with respect to the articles transported. They are class rates and commodity rates.

Class rates, for the most part, are applied to manufactures and merchandise of considerable value. There are

*The Commission tries to apply the yardstick, however, in such a way that the principle as a whole is observed, without “undue discrimination” in details.*

*Weight in proportion to bulk and distance of carriage are most important cost factors in freight transport.*

*Rates are divided into class rates and commodity rates.*



*Class rates are applied to most articles. The number of classes differs in the three territories.*

*Commodity rates are applied to specific commodities, mostly heavy goods making up greatest freight tonnage, such as coal, ore, lumber, steel.*

*In class rates the classification takes into account weight and bulk, risk of loss or breakage, and to some extent value.*

*Within a class, allowance is made for less cost of carload shipments, and for equal terminal cost of shipments for long or short distances.*

three major territories in which class rates are applied: the Official or Eastern, the Southern, and the Western. In a large book, known as the *Consolidated Classification*, the railroads list virtually every article that a railroad may be called upon to carry, and assign it to a group or class in each territory. Class rates are the rates applicable to these classes. The number of classes differs in the different territories.

Commodity rates are rates applicable to specifically named articles. For the most part these articles are heavy, bulky commodities, such as coal, ore, lumber, sand, and steel. Though the number of commodities moving under commodity rates is less than the number moving under class rates, the tonnage of the former is much greater. Commodity rates take precedence over class rates, and once a railroad gives a commodity a commodity rate between any designated points that becomes the legal rate. A class rate may no longer be applied to such a commodity, except in rare cases where provision is made for the "alternative" use of class and commodity rates.

With respect to class traffic, certain factors in the cost of service are taken care of in the classification. This is true, for example, of bulk in relation to weight, of risk of loss or breakage. Generally speaking, the more bulky an article is in proportion to its weight, the higher class rating it receives. It costs more to haul it, because, pound for pound, it takes up more space in a freight car than articles of greater density. In the same way articles of greater value, articles more susceptible to breakage, are put in higher classes.

When it comes to establishing rates within a particular class, the only cost factors the rate maker has left to consider are actual weight and distance. Rates are quoted at so much 100 pounds, the total charges varying in direct ratio to weight, due allowance being made according as the shipment is in carload or less-than-carload quantity. That leaves distance. The total charges do not vary in direct ratio to distance. In the first place, there are two terminal costs whether the haul is long or short. It is customary to use the "tapering" principle with regard to mileage, with

the result that the charge per mile becomes less as the distance becomes greater.

The decision of the Commission to adhere to the cost-of-service principle, reflected in weight and distance as the proven measures of reasonableness, led eventually to the establishment of rate "scales" for class traffic. The first such scale was constructed and adopted in 1917 for the Middle West. Rates were given in cents per 100 pounds. A definite percentage relationship was established between the classes, first class being 100, and the other classes scaled downward. A beginning rate of 16 cents, first class, was made for the first 5 miles. Then 1 cent was added for each additional 5 miles, up to 50 miles, then  $\frac{1}{2}$  cent a mile for each 5 miles up to 100, and so on. All a rate clerk had to know, to figure the class rate between two points, was the distance and the Commission's scale. And he could reconstruct the scale if he knew the first-class rate for the first 5 miles, the method of progression by distance, and the percentage relationship of the various classes. The determination of what constituted a reasonable rate under this system was simply a matter of arithmetical calculation.

The use of scales for the establishment of reasonable class rates spread quickly. Distance scales were adopted for all of the East and South and much of the West. The basic charges were somewhat higher in the West and South than in the East. Even in the East, in districts where population was sparse and industry not highly developed, the normal scales were modified to provide for higher basic charges.

The Commission was not slow to carry the distance principle into the making of commodity rates also. In overhauling commodity rate schedules in many sections of the country, use was made of mileage scales, and commodity rates were graduated according to the distance of the haul. But the practice has not spread so widely with commodity as with class rates.

*Scales have been made for class traffic so that rates can be easily calculated. Each class has a definite percentage relation to others (first class being 100), and distance is given the same "tapering" effect for all classes.*

*Scales are used somewhat also in commodity rates.*

### *Rate Structures Changed Substantially by Regulation*

The adherence of the Commission to the policy of basing rates primarily upon weight and distance brought

*Rates have come to be based on distance more than in the competitive period.*

*Competitive considerations and "value of service" have not been ignored, however, and some deviations from "cost of service" have been allowed, for equalization purposes.*

about a profound change in the rate structures which the railroads had established in the days when railroad transportation was a competitive business, structures in which the element of distance often received scant consideration. The basing-point system in the South was swept away, and violations of the long-and-short-haul rule were largely eliminated. The big Eastern "blanket" of transcontinental rates was pulled away, and class rates made higher for the long hauls; discrimination against the intermediate "intermountain" points of the Far West was for the most part forbidden. Even in the East, where the railroads had shown more respect for distance than in any other part of the country, class rates came to be based more closely on mileage. The system of "seaboard differentials" on domestic class traffic went into the discard, and Philadelphia, Boston, and Baltimore received rates which reflected their competitive relationship to New York from the standpoint of the distance from those seaports to the Middle West.

It must not be inferred that the Commission came to the point of disregarding altogether such factors in rate making as competition and value of service. There were many instances in which so-called "fourth-section"<sup>1</sup> relief was granted; that is, railroads received permission to charge more for the short than for the long haul, over the same line and in the same direction. The Commission endeavored often to establish a nice balance between regions competing in the production of the same commodity, so that the more distant points would not be placed at too great a disadvantage. It followed a policy of "port equalization," under which, for example, seaports on the Eastern seaboard were put upon a basis of substantial equality with New York in competing for the export traffic originating in the interior of the country. Such deviations from a strict application of the cost-of-service theory of rate making represented discriminations which could not be justified on the basis of differences in cost; but, possessing a large measure of discretion, the Commission, if it chose to do so, could often be fairly liberal in determining what constituted "undue" discrimination.

<sup>1</sup> As allowed under the fourth section of the Interstate Commerce Act as amended.



With the growth of motor-truck competition, which terminated the virtual monopoly which the railroads as a whole so long possessed in commercial transportation by land, the Commission was forced to give more recognition to the force of competition between rival carriers as an element to be taken into account in making reasonable rates, and on several occasions it has authorized railroads to make sharp reductions in rates on certain articles, between certain points, to "meet motor competition." The reductions thus permitted have not been justified by any change in the costs of transportation.

### *Regional Classification to Be Abandoned*

As was to be expected, the Commission did not succeed in pleasing everybody; but on the whole, its decisions have until recently been accepted with a fair degree of good grace by all parties. Of late years the South and the West have been growing restive under the class rate structures prescribed by the Commission. They have not criticized the Commission so much as they have criticized the railroads, which, they claim, entered into an unholy "conspiracy" with Eastern industrial interests to keep the South and the West in a state of "colonial subservency," by preventing the development of manufacturing in those regions. It has been the contention of certain Southern and Western interests that their class rates are too high in comparison with Eastern class rates, since, they contend, it costs no more to transport class traffic on the railroads of the South and the West than on the railroads of the East. Appeals to the Interstate Commerce Commission for a removal of the "prejudice" against the West and South not producing sufficiently speedy results, the Governor of Georgia sought permission from the U.S. Supreme Court to bring an original action in that Court on a charge that the railroads were maintaining a conspiracy in restraint of trade, in violation of the antitrust laws, by employing the long-practiced "conference" method of making rates. In a decision handed down in May 1945, the Court authorized such an action to be filed.

In June, however, before the suit could be started,

*The South and the West have become dissatisfied with class rates in those regions as compared with the East, and Georgia took the matter to the Supreme Court in 1945.*

*The ICC, however, made a temporary readjustment of class rates, and announced that a single scale for all regions would be prepared.*

the Commission handed down a decision on the complaint of the Southern and Western interests. The decision sustained the charge that the system of class rates in effect was unduly prejudicial to the South and the West and unduly preferential of the East. To remove the discrimination, the Commission declared that the railroads should establish a uniform freight classification, applicable to the entire country, to take the place of the old three major regional classifications; and it revealed its intention to construct a scale under which class rates from coast to coast should be graduated according to distance. Meanwhile, as a temporary measure of relief, the Commission ordered that class rates should be decreased 10 per cent in the South and the West (not in the Far West), and raised 10 per cent in the East, to bring the rates more nearly to a position of equality.

This decision of the Commission was to be expected in view of the policy it adopted several years ago of basing class rates, and many commodity rates too, primarily upon distance. There are many persons who are vigorously critical of this policy. They assert that the railroads and other transportation facilities were built to conquer distance, and that the Commission is requiring industry to succumb to distance; in other words, to add to the handicap of Eastern manufacturers in Southern and Western markets. They assert also that the rate-making policy does not give sufficient consideration to those peculiar features of competition which are inherent in an industrial system with high fixed costs.

That the Commission's rate-making policy, if carried to its logical conclusion, will have a strongly decentralizing effect upon industry can hardly be denied. High transportation charges tend to encourage geographical decentralization. Motor competition, which is more effective for short hauls, will serve to intensify decentralization, because reductions in rates for short hauls will result eventually in higher rates for long hauls, because of the revenue needs of the rail carriers. The past score of years has witnessed a tendency toward industrial decentralization in the United States, though to what extent this has been due to the influence of transportation rates it is impossible to determine with any great degree of accuracy.

## TRANSPORTATION POLICY OF THE GOVERNMENT

For all practical purposes one may assume that transportation is a corporate enterprise. The grant of capacity and power to a corporation is called a "franchise." The franchise to the transportation company is of a special sort. Whether it is for a canal, a railroad, a highway, a motor transport company, a water shipping line, or an air line, whether it is for the way or for the facilities for using the way, it carries with it certain exclusive features, special privileges and powers, and certain duties. In general there is not only the capacity to act<sup>1</sup> but the duty to provide a service. On account of the special privileges and exclusive features involved in transportation, the public interest may be expressed at the outset by granting the franchise only after a showing of public convenience and necessity. Whether the franchise, if granted, will result in a monopoly or in additional competition may be relevant in determining the question of public convenience, but it is not decisive.

Since the franchise of a transportation company is a grant of special privileges and is generally exclusive, at least as to certain areas, and since it imposes on the corporation certain positive duties to the public, it is obvious that government must make some provision to assure that it is exercised in the public interest. Unlike the ordinary business corporation, the public utility may not discontinue its activities at pleasure. For these reasons its policies and practices are a legitimate matter of public concern.

How detailed shall be the rules prescribed by government? Shall these rules be negative or positive, or both? Shall the government merely establish general rules, with perhaps specialized policemen to look after their enforcement, or shall it supplement these rules with administrative control? These are some of the questions which must be answered by the legislative authority of the government. In respect of a transportation company the degree to which it has a monopoly is an important factor in

*Since transportation companies operate under franchises, with special privileges, government must assure use of franchises in public interest.*

*How ought this supervision to be exercised, and to what extent?*

<sup>1</sup> Among the important special powers is that of eminent domain, by which private property may be taken for compensation for public use or welfare against the wishes of the existing owner.



determining the desirable extent of regulation. In the United States there are also questions as to the proper areas of control in which the federal, the state, and the local governments shall operate.

### *Summary of Government Regulation*

#### *Summary of government regulation.*

The magnitude of American railroad systems, their importance to our economic life, and our experience with their regulation, justify a brief summary of railroad regulation in the United States, with reference also to the regulation of other transportation.

The expansion of our railroad systems paralleled the full settlement of the United States and the consequent extension of agriculture and industry throughout the previously undeveloped areas of the continent. In this period of rapid development of our natural resources, emphasis was on the accumulation of wealth, with comparatively little attention to the effect of the means used upon the general welfare.

#### *Reasons for public regulation of railroads developed early, as financial manipulation and manifold discrimination accompanied railroad expansion.*

Although there was competition among some railroads, many roads, at least in certain regions, enjoyed a monopoly. The issuance of a large volume of railroad securities afforded opportunities for financial manipulation by persons in strategic positions. Insiders had immense opportunities for profit in land deals, and by contracts with construction companies in which they were interested. Railroads often practiced extreme discrimination between places and patrons for the purpose of advancing the individual interests of persons in control of the railroads. Even where discrimination had as its object the improvement of the road's competitive position, the losses caused by concessions to the favored were often compensated by added charges against those less fortunately situated. Early railroad discrimination, aside from the widespread free-pass evil, included rebates for exclusive dealing and large tonnage; secret rates to favored shippers; use of privately owned freight cars by some shippers who leased them at high rates to other shippers; special privileges of storage at terminals; misdescription of shipments by favored shippers to permit lower rates; unfair allotment

of cars during seasonal car shortages; discriminatory payments to shippers owning their own switch engines; and free lighterage service to shipboard at some ports for certain shippers.

Beginning with the enactment of the Interstate Commerce Act of 1887 forbidding discrimination in rates, providing for the publication of rates, requiring just and reasonable rates, and establishing the Interstate Commerce Commission, there has been a long series of federal statutes, which have brought virtually every phase of the railroad transportation under direct government control.

The Elkins Act of 1903 made deviation from published rates a misdemeanor. The Hepburn Act of 1906 granted the Commission power to prescribe maximum rates. This grant of power was intended to remedy the weakness in earlier legislation which had failed to give the Commission any rate-making power. The Mann-Elkins Act of 1910 authorized the Commission to suspend proposed rates and made more effective previously inadequate legislation designed to prohibit a relatively larger charge for short than for long hauls. In 1906 the list of regulated carriers was enlarged to include oil-carrying pipe lines. Gas pipe lines were brought under control by the Natural Gas Act of 1938. It should be added that, as the years have passed, the federal government has extended its control to waterways and motor and air transportation. The Intercoastal Shipping Act of 1933, the Motor Carrier Act of 1935, the Air Mail Act of 1934, the Civil Aeronautics Act of 1938, the Transportation Act of 1940 (dealing chiefly with domestic water transportation), and the fourth part of the Interstate Commerce Act, passed in 1942, to regulate the business of freight forwarders, have been the more important statutes by which federal activity in the regulation of transportation has been expanded.

The Transportation Act of 1920 permitted the Commission to fix minimum as well as maximum rates; included the rule of rate making which declared railroads entitled to a fair return; and contained a recapture clause, since repealed, requiring railroads receiving a net income in excess of 6 per cent on the value of their property to surrender one half of such excess income to the govern-

*The Interstate Commerce Act of 1887 was followed by numerous other acts extending federal authority over transportation.*

*Pipe lines, water carriers, motor carriers, air lines, and freight forwarders have all been brought under federal regulation.*

*The Transportation Act of 1940 declared national policy to be the equal and impartial regulation of all forms of transportation.*

*Abuse of monopolistic power was largely responsible for strict federal control of railroads.*

ment for a general railroad contingent fund. It gave the Commission power to fix joint rates; authorized the Commission to regulate interstate rates, when necessary, to prevent direct discrimination against interstate commerce; and directed the Commission to form a plan for consolidating the railroads into a limited number of systems. It is significant that this act also provided for the Commission's approval and consent as a prerequisite to the building or the abandonment of a railroad.

The Motor Carrier Act of 1935 gave the Interstate Commerce Commission about the same degree of control over common and contract motor carriers in interstate and foreign commerce that it possessed over interstate railroad transportation. The Commission was given similar power over domestic carriers by water by the Transportation Act of 1940. This act contained a declaration of national transportation policy which was, briefly, the equal and impartial regulation of all modes of transportation, to the end that the nation should have an efficient transportation system, adequate to the needs of its commerce and national defense.

When railroad regulation began, many railroads possessed a monopoly which enabled them to make whatever rates they chose. In areas where actual monopoly did not prevail, nominally competing railroads had entered into combinations for the control of rates, combinations which were often as effective as a monopoly of ownership. Unquestionably the monopolistic control of rates resulted in charges to the public which were often excessively high. Unfair and oppressive discrimination in rates and services was a common practice. Under the circumstances it was obvious that public control of the railroads was essential. Since the mild measures adopted in the early days of regulation did not lead to a voluntary correction of the abuses of which the public so bitterly complained, it was inevitable that regulation should be expanded and strengthened to such a degree that it would be impossible for the roads to indulge in the monopolistic practices condemned by the public generally. Railroad regulation had its origin in public resentment at the abuses flowing from monopoly power.



In recent years, with the phenomenal development of transportation by highway and by air, and in some regions, of transportation by water, it has become plain that the railroads no longer have the monopolistic powers which once, either singly or in combination, they undeniably possessed. The government has taken steps to assure the continuance of this new competition, either by forbidding one type of carrier to control another type, or by greatly restricting its power to do so. Oddly enough, however, the government continues to regulate the railroads, as well as other forms of transportation, just as if the condition of monopoly still prevailed. Regulation has in fact become more restrictive, rather than less, notwithstanding the changed conditions. Management seems to become less and less independent; it is required more and more to seek the authorization of regulatory bodies for any action it desires to take in the conduct of its business. In the light of changed conditions might it not be advisable to undertake a survey of our present system of regulation? As to the various later types of transportation, Congress has followed the plan, for the most part, of regulating each new agency as the railroads have been regulated. Might it not be well for Congress to consider the regulation of *transportation*, as a whole, rather than of the individual parts of the system?

Should not the entire problem of regulation be reexamined with a view to simplification, increase of management's opportunity to use initiative, and encouragement of the correlation of transportation functions? If the burdens of regulation could be reduced for government in particular fields, notably that of railroads, it might be feasible to bring all transportation agencies under the general supervision of a single federal authority. With respect to the use of safety appliances, regulation should be continued and perhaps extended. Laws prohibiting undue discrimination of all sorts should be maintained and vigorously enforced. The supervising authority would be an expert policeman assisting in the enforcement of such laws. With respect to "reasonableness," rate regulation should be restricted to situations clearly demanding control of carriers in a monopolistic position. As far as

*But railroads no longer have this monopolistic power; nor do other transportation agencies. Yet regulation has become stricter.*

*The entire problem of regulation of transportation should be reviewed in the light of changed conditions.*

possible, managements not only of railroads but of other transportation enterprises should be free to administer their business in accord with the principles of individual enterprise.

EFFECT OF THE WAR UPON DOMESTIC TRANSPORTATION

*The impact of the war on transportation in the United States is shown in Tables 2-8.*

International conflicts of the magnitude of World Wars I and II impose a great burden upon transportation, because of the increase of traffic and because of the changed conditions under which the various tasks must be performed. The impact of war upon transportation is not the same in all countries; nor has it been the same in the United States during the two wars. In the second war the United States was fighting a two-ocean war; it was

TABLE 2.—RAILWAY TRAFFIC—CLASSES I, II, AND III STEAM RAILWAYS  
(In millions)

Year	Passenger-miles	Freight, revenue tons carried one mile
July 1914-June 1915	32,475	277,135
July 1915-June 1916	34,309	343,477
Jan 1-Dec. 31, 1916	35,220	366,173
1917	43,212	408,778
1939	22,713	335,375
1940	23,816	375,369
1941	29,406	477,576
1942	53,747	640,992
1943	87,925	730,133
1944	95,663	740,586

SOURCE: Interstate Commerce Commission, *Statistics of Railways*.

fighting a war much more highly mechanized than the first; it required the movement of far more goods and necessitated the mobilization and transfer of far more men over far greater distances.

In both wars there was a great increase in the traffic to be moved. In World War I railway freight traffic increased from 277 billion revenue ton-miles in 1915 to 409 billion in 1918, an increase of 47 per cent; while World War II showed an increase from 335 billion revenue ton-miles in 1939 to 740 billion in 1944, or an increase of 121 per cent. Passenger traffic during World War I rose from 32 billion passenger-miles in 1914 to 43

billion in 1918, or about 31 per cent. Passenger traffic during World War II rose from 23 billion passenger-miles in 1939 to 96 billion in 1944, or an increase of 317 per cent. For more details relating to the changes in the volume of freight and passenger traffic of all steam railroads during the two wars, see Tables 2 and 3. The economy of the United States in World War II was called upon to maintain a high degree of productivity, while diverting a large fraction of the man power to military and allied pursuits. More goods were produced and were hauled more miles.

TABLE 3.—DOMESTIC COMMODITY TRAFFIC  
(In millions of ton-miles)

	1939	1940	1941	1942	1943
Railroad (Class I—Line-hand Railway) <sup>1</sup> .....	363,875	405,376	315,146	680,296	772,343
Intercity motor truck.....	20,519	23,410	31,000	34,100	37,600
Domestic water-borne.....	314,800	339,400	345,000	211,300	183,100
Oil pipe lines.....	63,107	67,270	77,818	84,480	110,000
Air (express and mail).....	11	14	18	33	51

<sup>1</sup> Includes revenue and nonrevenue.

SOURCE: *Survey of Current Business*, May 1944; for railroads, Interstate Commerce Commission; for motor trucks, 1939 Interstate Commerce Commission, and other years estimates by U.S. Department of Commerce; for water-borne, 1939, and 1940, Army Chief of Engineers and unpublished data of the National Bureau of Economic Research, other years estimates by the U.S. Department of Commerce; for oil pipe lines, 1939-1942, Interstate Commerce Commission, and 1943 estimates by U.S. Department of Commerce; for air, *Civil Aeronautics Journal*, Jan. 15, 1944.

In view of the greatly enlarged volume of freight and passenger traffic handled during each war as compared with the period just preceding the outbreak of the wars, it is interesting to note that there were only slight increases in the numbers of locomotives and passenger and freight cars in 1918 over the numbers in 1915. The total number of freight cars was increased from 1.68 million in 1939 to 1.80 million in 1944, only 7 per cent. The total number of passenger cars has actually declined since 1939. The changes are set forth more fully in Table 4. These data emphasize the fact that railroads without greatly enlarged facilities effectively handled a larger volume of business.

The total operating revenues of all steam railroads together with the operating and other expenses are shown in Table 5. Operating revenues rose from 4.1 billion dollars in 1939 to 7.7 billion in 1942, while operating expenses



rose from 3.0 billion dollars in 1939 to 4.7 billion in 1942. Interest on funded debt and other expenses, not including taxes, increased much less rapidly than total income. This

TABLE 4.—EQUIPMENT IN SERVICE (CLASSES I, II, AND III STEAM RAILWAYS)

Year ended	Locomotives	Passenger-train cars	Freight-train cars (excluding caboosé cars)
June 1915	66,502	55,810	2,341,567
June 1916	65,314	54,774	2,313,378
Dec. 31, 1916	65,595	55,193	2,329,475
1917	66,070	55,939	2,379,472
1918	67,936	56,611	2,397,943
1939	45,172	38,977	1,680,519
1940	44,333	38,308	1,684,171
1941	44,375	38,334	1,732,673
1942	44,671	38,446	1,773,735
1943	45,406	38,331	1,784,472
1944	46,305	38,217	1,797,012

SOURCE: Interstate Commerce Commission, *Statistics of Railways*.

accounts for the fact that the balance, after all expenses and dividends had been paid, amounted to 781 million dollars in 1942 as compared with 35 million loss in 1935.

TABLE 5.—INCOME ACCOUNT—ALL STEAM RAILWAYS  
(In millions of dollars)

	1939	1940	1941	1942
Operating revenues.....	4,140	4,459	5,541	7,691
Operating expenses.....	3,019	3,200	3,791	4,748
Taxes and net equipment and joint facility rate.....	485	527	701	1,406
Net railway operating income.....	636	732	1,049	1,537
Other income.....	90	93	97	103
Total income.....	726	825	1,146	1,640
Rent for leased roads and equipment.....	16	16	16	16
Interest on funded debt <sup>1</sup> .....	515	548	545	545
Other deductions.....	88	54	59	88
Net income.....	107	207	526	991
Dividends <sup>2</sup> .....	142	176	199	210
Balance.....	-35	31	327	781

<sup>1</sup> This item represents accrued and not interest paid, some of the accruals being in default.

<sup>2</sup> Represents dividends declared from surplus and income.

SOURCE: Interstate Commerce Commission, *Statistics of Railways*.

Of equal, if not greater significance, was the heavy diversion of traffic from customary channels. Without specific enumeration of the changes that have taken place,

it can be stated generally that the intercoastal water traffic<sup>1</sup> virtually disappeared, and that the coastwise volume declined greatly; while the Great Lakes traffic expanded enormously, owing to the iron ore and coal expansion, and pipe lines stepped up their traffic considerably.

TABLE 6.—MOTOR-VEHICLE REGISTRATION  
(In thousands)

Year	Passenger cars	Motor trucks	Total
1914	1,626	86	1,712
1915	2,310	136	2,446
1916	3,298	215	3,513
1917	4,657	326	4,983
1918	5,622	525	6,147
1939	26,201	4,414	30,615
1940	27,435	4,590	32,025
1941	29,507	4,876	34,383
1942	27,974	4,608	32,582
1943	26,019	4,480	30,499
1944	25,608	4,528	30,136

SOURCE: Automobile Manufacturers Association, *Automobile Facts and Figures*.

Motor-vehicle registrations for passenger cars and motor trucks increased rapidly during World War I, but the total number was still so small that they moved only a small volume of traffic. Passenger cars rose from 26.2 million in 1939 to 27.9 million in 1942; during the same period motor-truck registrations increased from 4.4 to 4.6 million (see Table 6). The volume of business handled showed marked increase (Tables 3 and 7) despite the small increase in registrations. The intercity bus was called upon to carry a much larger volume of traffic and the transit systems within our cities carried in the war years and are carrying today a much heavier load than in 1940. On the other hand, private automobiles sustained a heavy decrease in utilization, largely because of shortage of gasoline.

Ocean transport also felt the impact of war. But so vital was the part of shipping to our effective participation in the great conflict, that, despite the great losses due to

<sup>1</sup> For the growth and changes in the volume of traffic carried by railroads and the decline in the coastwise and intercoastal traffic, see Thor Hultgren, *Railway Traffic Expansion and Use of Resources in World War II*, National Bureau of Economic Research, 1944, pp. 7-9.

submarine war to every nation, our shipbuilding facilities were enlarged to such an extent that each year of the war witnessed a substantial net increase in the tonnage of American shipping, both commercial vessels and vessels of war.

TABLE 7.—MOTORBUS LINES—PUBLIC AND PRIVATE CARRIERS

	1940	1941	1942	1943
Number of operating companies (Dec. 31)	3,478	3,560	3,600	4,350
Number of buses (Dec. 31)	54,000	58,658	69,221	75,310
Intercity	18,000	18,420	22,710	27,700
City and suburban	33,550	37,855	44,111	45,610
Sight-seeing and charter hire	2,450	2,383	2,400	2,000
School buses	87,300	87,400	79,000	77,850
Miles of highway covered (Dec. 31)	343,300	361,000	400,000	440,000
Revenue bus-miles, millions	1,981	2,112	2,648	2,758
Revenue passengers, millions	4,186	4,924	7,153	9,235

SOURCE: McGraw-Hill Publishing Company, Inc.

TABLE 8.—DOMESTIC AIR CARRIERS—FISCAL YEAR ENDING JUNE 30

	1940	1941	1942	1943
Mileage, in thousands:				
Pay-mail miles flown	59,288	76,237	93,853	94,890
Other revenue miles flown	36,108	47,113	41,424	3,304
Total revenue miles flown	95,396	123,350	135,277	98,194
Nonrevenue miles flown	4,078	4,978	4,758	2,822
Total miles flown	99,474	128,328	140,035	101,016
Number of revenue passengers <sup>1</sup>	2,240,023	3,216,469	3,986,220	2,833,484
Traffic cargo, in millions:				
Mail pound-miles	18,680	22,318	31,440	56,793
Express pound-miles	5,990	8,313	15,907	28,701
Excess baggage pound-miles	1,564	2,256	3,574	5,670

<sup>1</sup> Number of revenue passengers prior to January 1942 is inflated to an indeterminate extent by multiple count of all interroute traffic arising from the fact that passengers were separately counted on each route.

SOURCE: Annual Report of the Civil Aeronautics Board.

The vital part which air transport played in this war led to enormous expansion of aircraft production, a substantial portion of which represented craft actually used in military transport as well as in fighting activities. Although the war virtually stopped the construction of private automobiles and caused the complete conversion of that industry to war construction, and dealt out new equipment to railroads with a parsimonious hand, it enlarged the production of ships and airplanes. The total



number of miles flown and the number of revenue passengers rose rapidly from 1940 to 1942, but declined considerably in 1943 as compared with 1942. The traffic cargo including mail, express, and excess baggage increased sharply from 1940 to 1943. It should be emphasized, however, that the total volume carried is but a small fraction of total of similar traffic carried by the railroads. For more complete details for the years 1940 to 1943, see Table 8.

The enormous expansion of air transportation during the war will undoubtedly lead to a great increase of commercial air transport in the postwar years. It is the form of transportation which now seems to have the highest immediate future. As the Civil War indirectly contributed a powerful impulse to railroad development, World War I to steamship and automobile, World War II has undoubtedly contributed much to the expansion of air transport.

#### POSTWAR TRANSPORTATION PROBLEMS

The United States is confronted with two large transportation problems; namely, what to do with ocean-going ships, and with the aircraft industry. At the end of World War I, the major problems in the field of transportation were the return of railroads to private enterprise and the disposal of ocean shipping. Thanks to the rail performance during this war, private vs. government ownership of the railroads is not likely to be a pressing problem unless political expediency is injected into the issue. But the merchant marine problem is greater than it was after World War I, for the United States has emerged from the recent war with the largest tonnage of shipping in its history, much of which represents high-cost construction. The airplane will doubtless take a substantial portion of oceanic passenger business; but with our foreign commerce carried at average rates of 1.6 mills per ton-mile, and at least three quarters of it at less than 1 mill per ton-mile, the day when air liners will be able to take over much of the cargo from ocean vessels appears to be rather remote.

Aircraft productive capacity offers another problem of first magnitude. Its enormous expansion is well known; we have emerged from the war with a capacity for plane

*Postwar transportation problems of greatest magnitude are what to do with ocean-going ships and what to do with the aircraft industry.*

*Some aircraft capacity is converted to other uses.*

production much greater than needed to meet any reasonable demand for military and commercial purposes. Some of this capacity is being returned to the production of automobiles and other products, especially in those plants formerly engaged in the automotive industry.

*More than prewar capacity, however, will be needed.*

Large expansion in domestic and overseas commercial air transport is in prospect for 5 to 10 years. On the domestic front it is reasonable to expect that commercial air lines will be carrying something like five or six times their prewar passenger traffic by 1950; but calculations must not ignore the effects of a postwar recession in business activity from the war peak. More mail will take to the air; and, with the reductions in cost, more cargo will be carried in airplanes. It is a reasonable prospect that overseas air transport may in the course of a few years succeed in building up a large volume of new business and vacation travel. With a service taking less than one day to reach Europe, the rates no higher than prewar second-class steamship rates, many people who have never traveled to that continent will be able to do so in their customary 15-day vacation periods. Similar developments may be expected in the South American sector, where the greater distances and the longer steamship time have been a deterrent to travel. Asia and Australasia likewise open up promising fields for expansion of air transportation.

*Automobile production will be high.*

*And much railway equipment is needed.*

The American public is also returning to its automobile; and there should be an intense demand for new cars for several years, to overcome the nonreplacement of cars during the war period. The railroads have been running out the useful life of much of their equipment. Many of them have made extensive plans for renovation of their trackage and equipment, including the provision of streamlined trains in greater number with faster schedules and more comfortable coach accommodations. Fares may be low enough to permit competition with bus and private automobile, and lower than the reduced airplane fares.

*Public policy in regulation of transportation may be quite dif-*

The incidence of politics upon transportation should not be ignored. Increasingly, even in the United States, politics in terms of votes has been a factor not to be disregarded. Public policy with respect to important questions such as coordination and integration of transport

systems, monopoly and competition, subsidy and self-support in relation to national defense, jobs for labor, aids to this or that industry, and votes for officeholders and social planners, may in the long run produce a transportation system quite different from that which economic reasoning would suggest.

*ferent from  
what economic  
reasoning  
would suggest.*

### *The Postwar Merchant Marine*

One of the major postwar problems is determination of national policy as to the American-flag merchant marine. Owing to the war the United States has become the world's greatest maritime power. Should it endeavor to remain so? Is a large American-flag merchant marine either necessary or desirable? Should the taxpayers subsidize the shipbuilding and ship operating? Do the interests of national defense require a large national merchant marine available to carry our men and materials in case of war? These are highly important postwar problems. Sound answers to them will have a vital bearing, not only on the national defense interests, but also on the postwar domestic employment and external trade of the United States.

*The problem of  
the postwar  
American mer-  
chant marine  
concerns not  
only national  
defense but  
also domestic  
employment  
and external  
trade.*

This subject cannot, however, be considered solely on economic grounds, since the most important factor to be taken into account, in studying the question whether we should have an American merchant marine, is the matter of national defense. We start with the premise that the United States Navy should be maintained at the strength and technical proficiency necessary to discourage an assault upon this country or its possessions, and to enable this nation to discharge its responsibilities for world security.

In time of war considerations of national defense also require that the United States have a substantial merchant marine fleet, able to carry a large volume of shipping of men and supplies. Since we should not be dependent on buying or renting vessels from other nations, and since a merchant fleet cannot be created overnight, it follows that the United States should have a peacetime merchant marine of its own, adequate in size to provide for the nation's essential needs in time of war. Only with such a



peacetime merchant marine can we keep active the ship-building and ship-repairing facilities which are so vital in time of war. This means that in determining the variety, speed, and tonnage of our peacetime merchant marine due weight should be given to the opinions of the Army, Navy, shipbuilding, and ship-operating authorities.

*We should support subsidies as long as necessary to maintain the merchant marine.*

*International transport should be carried on under private ownership and operation, and ships should be constructed by private industry on a competitive basis.*

*A planned replacement and development program should be set up.*

*The government should seek arrangements with other nations to prevent discrimination against American ships.*

1. Since the shipping industry is essential to the national defense and the trade of the United States, both government and industry should support its subsidization, as long as it continues to be necessary for maintenance of the American merchant marine. Even though subsidies are to be condemned on purely economic grounds, as we point out elsewhere, national defense needs may, as in the case of the merchant marine, justify their usage.

2. The general principle should be followed that peacetime international transportation and insurance thereof should be carried on under private ownership and operation by those who can do so most efficiently and without subsidies, except so far as these may be necessary to maintain a sufficient volume of American shipping.

3. American naval and merchant vessels should be constructed by private industry on a competitive basis.

4. The American-flag merchant marine should be under private ownership and operation, thus promoting both efficiency and competition.

5. Technical progress involved in the construction and operation of naval vessels should be made available to reduce operating costs and to improve service in maritime commerce.

6. In order to maintain an adequate private ship-building industry, there should be a planned replacement and development program working through engineering competition designed to promote technical leadership and provide the capacity for emergency expansion. Such a replacement program would result in the replacement of old ships by ships of equal or better quality as rapidly as the old ships wear out or become obsolete for national defense.

7. The United States government should seek to enter into arrangements with other nations under which

there would be no discrimination against American ships, and appropriate penalties in case of discrimination against them.

### *Some Current Railroad Problems*

It is not the function of this chapter to offer solutions for all the unsettled transportation problems, but it seems desirable to point out some of the important questions which must be considered in order better to understand the difficulties involved in developing a well-coordinated and efficient transportation system. These problems are listed on the assumption that a continuance of private ownership and operation of transportation is desirable and conducive to public welfare. The following are some of the important problems:

1. The question of alleged discrimination against railroads in taxation persists. Do motor and air lines have an unfair advantage over railroads by reason of the fact that the government has provided the roads over which buses and trucks operate or airports used by air lines?

2. What is the future place of air lines in transportation? To what extent should competition between air lines over the same routes be encouraged or discouraged? Should railroads be allowed to own air lines, or vice versa? What form of regulation will be necessary or practicable as to world airways? What arrangements for international reciprocal privileges? What relations should air rates bear to railroad rates?

3. The whole field of competitive rates should be explored. It has been alleged that regulation is no longer needed since the railroads have substantial and effective competition, from buses, trucks, automobiles, and airplanes. Is this true?

4. The question of subsidies to certain carriers should be reconsidered. Is the government justified in providing subsidies for any transportation agency? If so, why and to what extent? To what extent should government improve waterways?

5. The past failure of transportation agencies to coordinate fully their efforts and facilities to provide a

*Current railroad problems involve the whole matter of government regulation of transportation.*

*Some important problems are discrimination in taxation, competition with other types of carriers, government subsidies to competitors, and coordination of transportation facilities.*

*Others are re-organization of financial structures, elimination of duplicate facilities, relations between labor and management, and effect of increased restrictions of management in policy making.*

more economical and more efficient transportation system raises the question: How may such coordination be realized in the future?

6. During the depression of the thirties, about one third of the mileage of American railroads became financially embarrassed. Many roads went into receivership. During the war, traffic was heavy, and railroad earnings were in general higher than at any previous time in our history. Accordingly, railroad finances have been greatly strengthened. This applied both to solvent roads and to roads in receivership. Reorganization of railroads in receivership is now proceeding rapidly, and both the Interstate Commerce Commission and the courts of jurisdiction are taking the position in most instances that equities of such roads, both preferred and common stocks, are without value. This is in spite of enormous earnings on many of these stocks, which have now continued for several years. If the United States maintains a prosperous and vigorous economy, substantial earnings on the old capital structures of railroads are not only possible but likely. Hence arbitrary action which bases new capital structures on earnings performances during the thirties, disregards recent earnings, and in effect denies the possibility of earnings in the future is not justified either economically or ethically and constitutes a direct attack on the system of individual enterprise. Legislation is urgently needed to prevent this form of abuse.

7. The financial position of many carriers is not such as to assure the availability of a sufficient volume of capital funds to enable the carriers to make the improvements which are necessary for the postwar transportation system. How can the security of private investment in the transportation system be protected?

8. The duplication of facilities for certain areas is evident. How can excess tracks of some railroads be eliminated, or idle or unused lines be discontinued? How can railroad facilities be adjusted to the actual needs of the public?

9. The proper relations between labor and management constitute a real problem for the future. If railroads, for example, are going to be able to provide the type



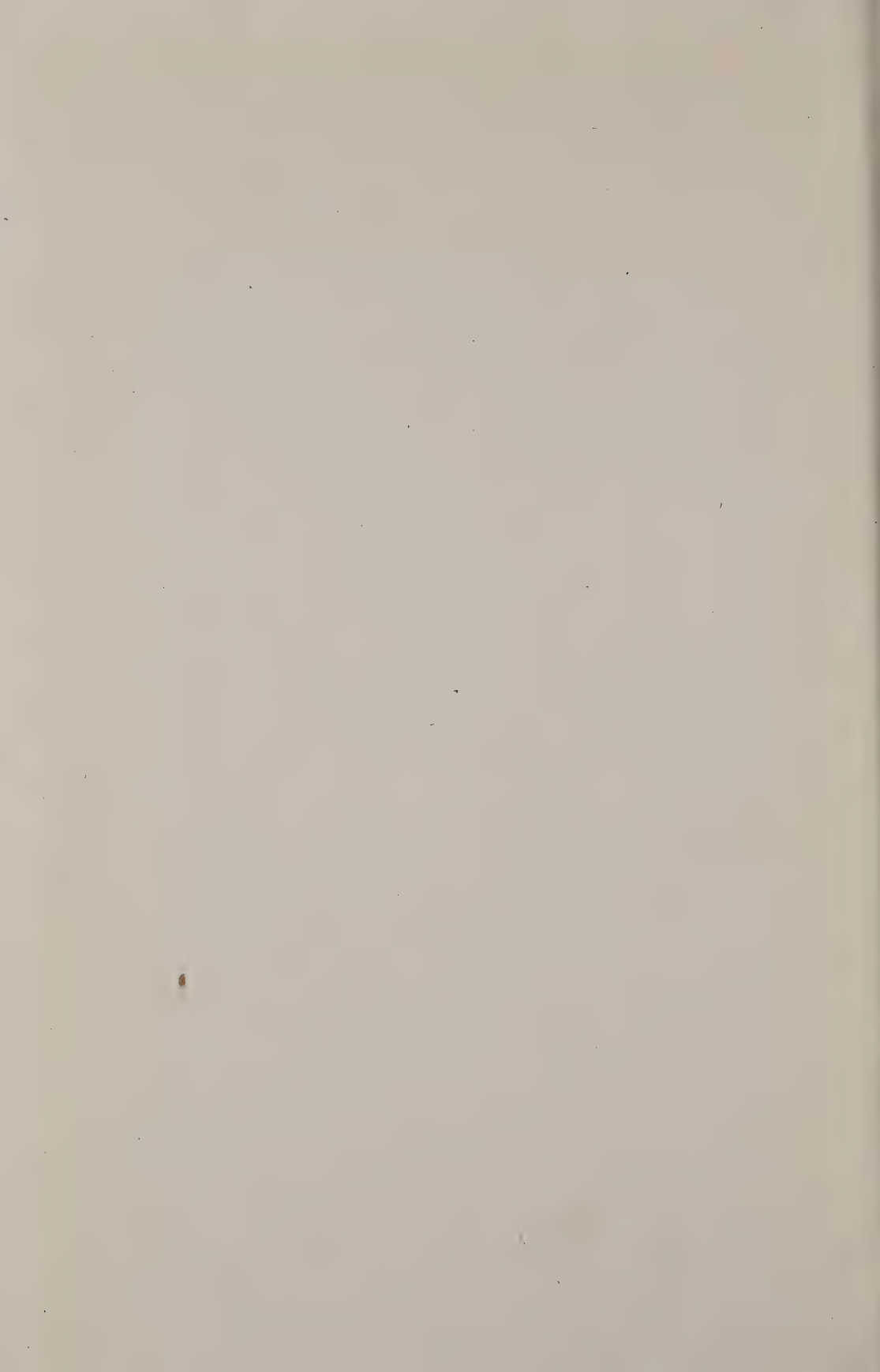
of service now required by the public, they must be free to adopt new policies, to make needed economies not only in labor costs but also in management and overhead costs. This does not mean a lower scale of pay to employees, but it should mean that efforts to "make work" or to increase employment unnecessarily are undesirable.

10. What is the proper role of the government? Should the government control the machinery for rate making and for regulating the finances of transportation agencies? Does the government have too much influence on wage policies or limit too rigidly the actions of management in formulating new policies? Will such restrictions or controls lead finally to government ownership?

















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